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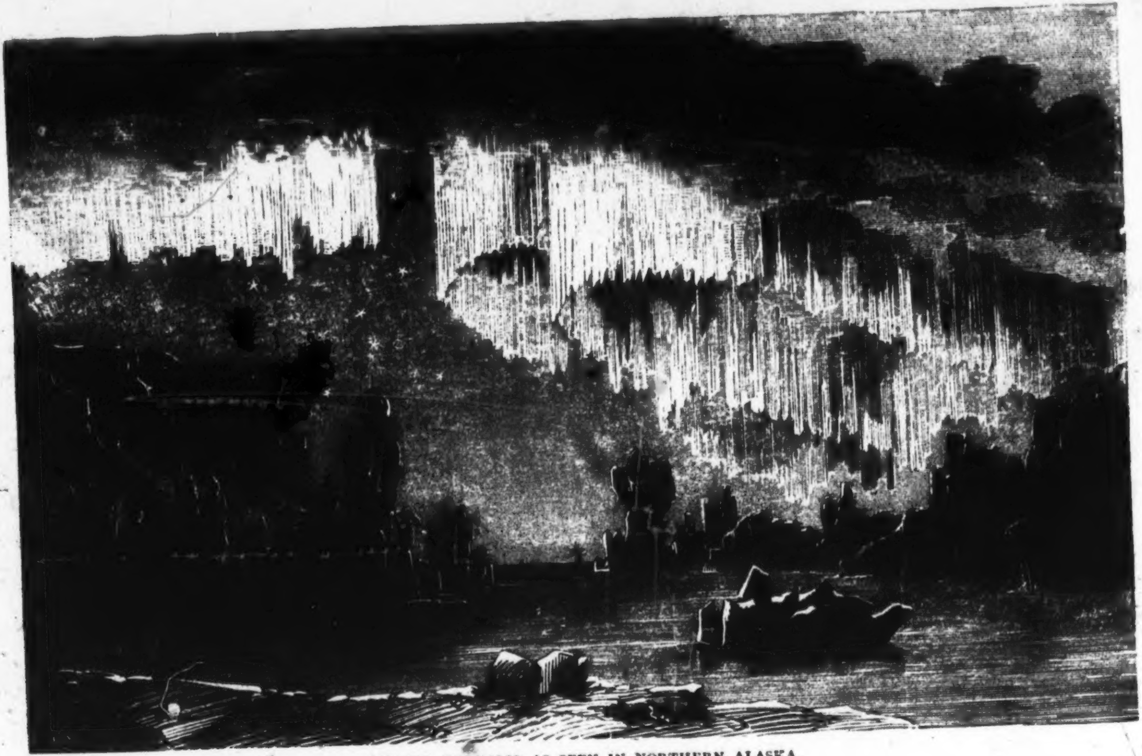
THE YOSEMITE FALLS AND VALLEY, CALIFORNIA.

Falls 2,700 feet in height. First fall 1,600 feet. Second Fall 700 feet. Lower Fall 400 feet.



AURORA BOREALIS, AS SEEN IN NORTHERN ALASKA.

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THE

# GOLDEN STATE:

## A HISTORY OF THE REGION
## WEST OF THE
## ROCKY MOUNTAINS;

EMBRACING

## CALIFORNIA,

OREGON, NEVADA, UTAH, ARIZONA, IDAHO, WASHINGTON TERRITORY,
BRITISH COLUMBIA, AND ALASKA,

**From the Earliest Period to the Present Time:**

GIVING A FULL ACCOUNT OF

THE DISCOVERY OF THE COUNTRY; EARLY VOYAGES OF SPANISH, ENGLISH
PORTUGUESE, FRENCH, RUSSIAN AND AMERICAN NAVIGATORS; RULE OF
SPAIN, MEXICO, AND THE UNITED STATES; EARLY SPANISH MISSIONS;
REVOLUTIONS; CONQUEST BY MEXICO AND BY THE UNITED
STATES; INAUGURATION OF AMERICAN CIVILIZATION; DISCOVERY OF GOLD; MINING, MINERALS, COMMERCE,
AGRICULTURE, AND MANUFACTURES;

ALSO, A FULL DESCRIPTION OF THE

MOUNTAINS, SCENERY, VALLEYS, FORESTS, FLOWERS, RIVERS, LAKES, ISLANDS, DESERTS,
WATERFALLS, BAYS, HARBORS, SPRINGS, GEYSERS, CLIMATE, SEASONS, NATIVES, BIRDS,
FISHES, BEASTS, LANDS, NAVIGATION, ROADS, DITCHES, CANALS, POPULATION,
CUSTOMS, SOCIETY, CHINESE, COURTS, LAWS, EDUCATION, SCHOOLS, RELIGION, CHURCHES, LITERATURE, EMIGRANTS, CITIES, COUNTIES,
TOWNS, PROFESSIONS, TRADES, AMUSEMENTS, Etc.

WITH A HISTORY OF

## MORMONISM AND THE MORMONS.

### BY R. GUY McCLELLAN,

(Seventeen Years a Resident of the Pacific Coast,)

AUTHOR OF "REPUBLICANISM IN AMERICA," ETC.,

Illustrated with Numerous Maps and Engravings.

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Rev. A. N. Wilson

# PREFACE.

In presenting to the reader that region of the Republic of America lying west of the Rocky mountains, a territory bewildering in its vastness, and fertile, rich, varied, wild, and picturesque beyond description, reveals its charms; and a history of unbounded fascination, leading its devious courses through the rough seas of the buccaneer and navigator, over the arid plains and precipitate mountains of the explorer, checkered and interspersed with the pilgrimages of the holy fathers, the march of conquering bands, the achievements of invading armies, the rise and fall of nations, the events of discovery and conquest, the revealing of unlimited treasures, the opening of new avenues of commerce, the building of new societies, the founding of new states, the advent of new social and religious conditions, the weird enchantments of the phantom king, gold, and the delusive and fascinating hopes of his devotees is unfolded.

The binding together of the extremes of the nation by bands of steel, upon which the swift courser with iron hoof and fiery breath leaps over vast plains and climbs arid heights in his journey from sea to sea, the broad-winged messenger of commerce teaching the lesson of exchange and intercourse to the Orient and new republic, daily tend to awaken interests in our newest but richest half of the nation, and familiarize the people of every clime with the unrivalled beauty and attractions of that vast domain, passing from the chaos of bygone ages into the activities of unsurpassed social and commercial life.

So little is known abroad respecting the vastness, fertility, natural wealth, genial climate, and great development of the Pacific slope, that I write in the ardent hope of drawing the attention of the public of America and the adventurous of all lands to a section embracing more than one-half of the area of the whole American Republic, and

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containing more of the precious metals than all the world beside—a land whose giant mountains in their eternal ermine crowns, looking from their thrones of clouds. forest trees lifting their arms toward the sky, and mountain urns tumbling their crystal floods from aerial heights, present the grandest scenes of terrestrial beauty.

Many books have been written respecting the Pacific coast and its people; but, in most cases, they have been the result of the exaggerated and distorted visions of early voyagers, or the superficial observer, catching brief glimpses of the Sierras in hurried trip from ocean to ocean, or the wild dreams of some enthusiast fresh from the snows of the East, plunged into the flower gardens of the Golden State, and sipping the rich wines of Los Angeles at the festive boards of kind friends.

In producing a History of the *whole Pacific Coast,* from the northern extreme of Alaska to the tropical regions of Mexico, I have brought to my aid the experience of seventeen years residence and active participation in the stirring events and business affairs of the country, and extensive travel and observation in California, Nevada, Oregon, Utah, Idaho, Washington Territory, and British Columbia, where, by the camp-fire of the pilgrim gold-hunter, in the dark chamber of the mine, on the tedious march, and dangerous ascent of the mountain height, the checkered fortune and uncertain fate, I have been enabled to present from personal and long experience the chief events whereof I write.

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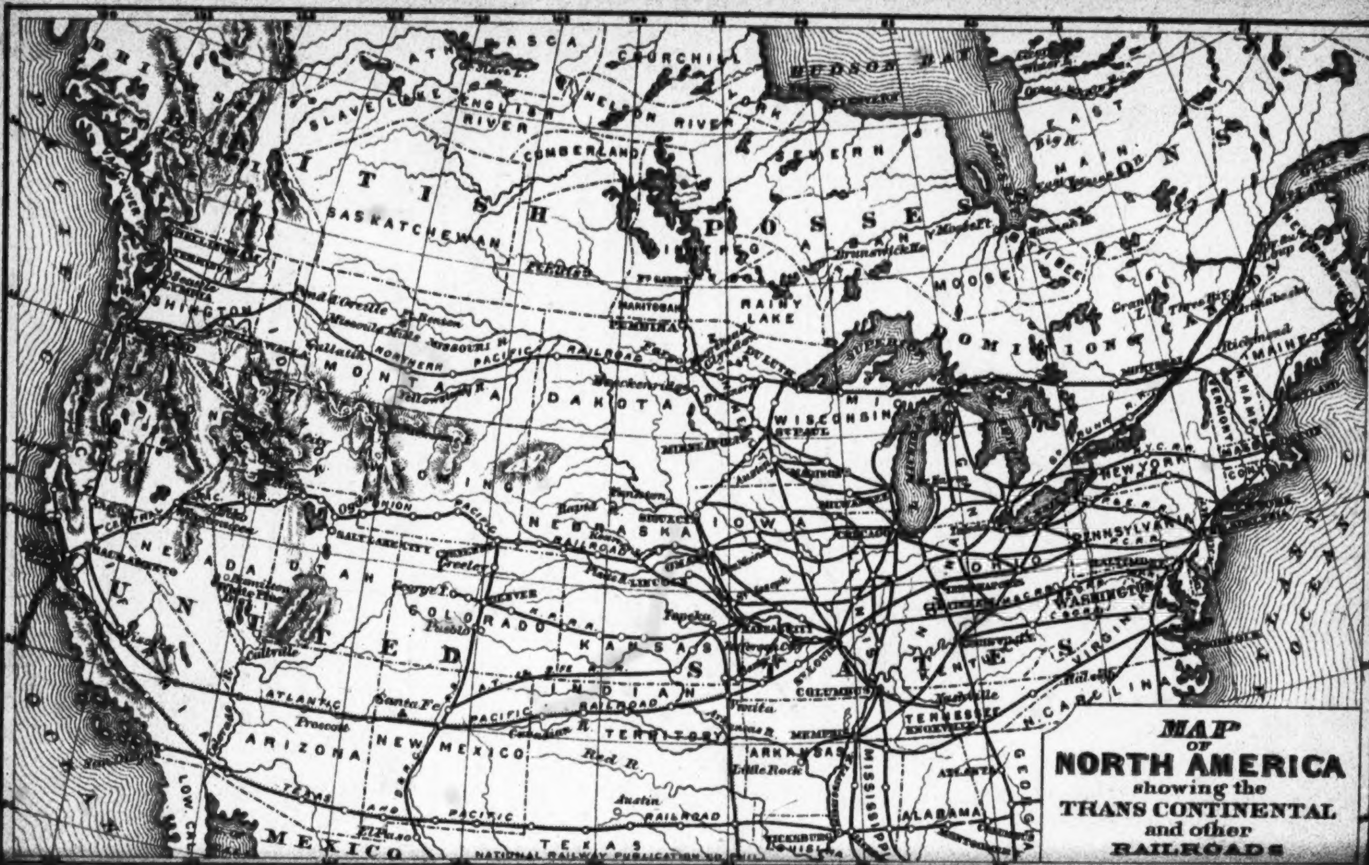

# MAP OF NORTH AMERICA showing the TRANS CONTINENTAL and other RAILROADS

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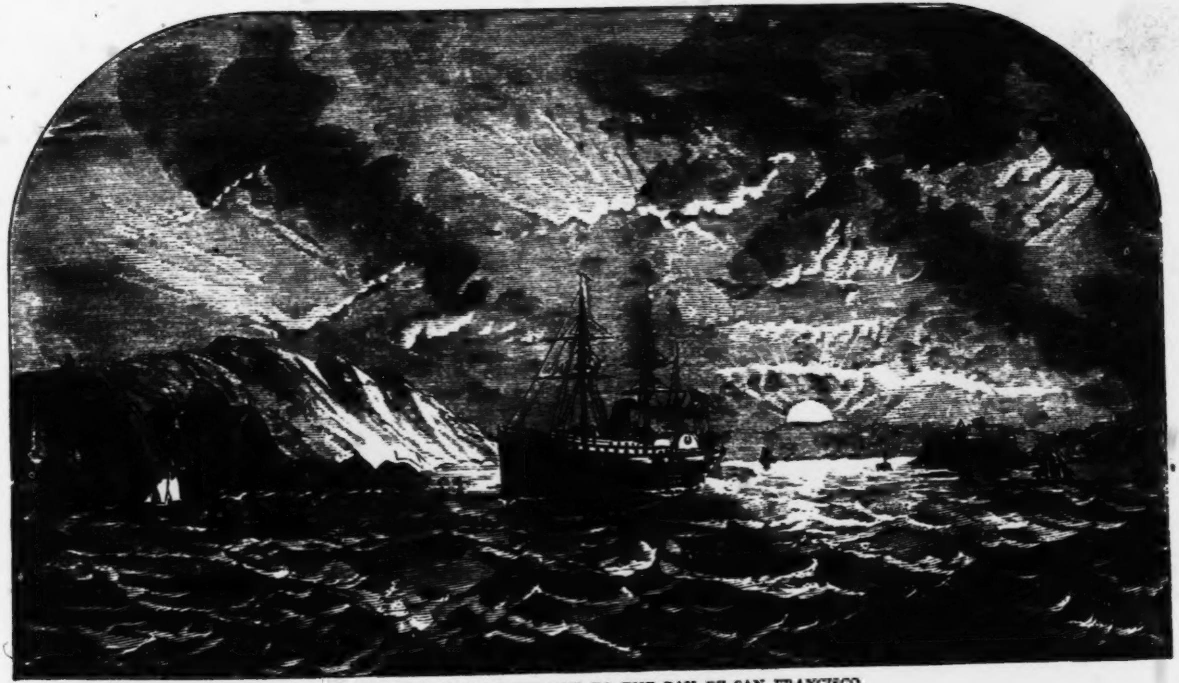


THE GOLDEN GATE—ENTRANCE TO THE BAY OF SAN FRANCISCO.

# THE GOLDEN STATE

## CHAPTER I.

Discovery of America—Earliest Colonization—Columbus' Voyages —Spanish in South and Central America—Cortez in Mexico —Cabrillo and Drake in California—Behring, Cook, Vancouver, and other navigators—Jesuits—Acquisition of California—Discovery of Gold.

THE growth of civilization and colonization in what is termed the New World presents many striking features of interest; and the tedious march of progress in the early history of the country contrasts forcibly with the rapid strides of popular institutions, education, and the advancement of the present period.

Modern colonization in America, as it marches westward, subduing prairie and forest, spanning rivers and piercing mountains, establishing governments, founding states and cherishing civilization, is in hopeful contrast with the decay of many of the countries and governments of Europe, where a stagnation of ideas, stereotyped monotony, and general apathy of the people mark the decline of many of these countries, whose haughty rulers reigned in splendor centuries before America was known.

Colonization and civilization in America advanced with singular irregularity; often contending with most formidable natural obstacles, while vast regions, most inviting and possessing great natural attractions, were entirely neglected or unknown. Thus, while the seeds of our social and national existence were being sown in the east, the vast territory of California, with its rich soil, genial climate, and balmy atmosphere, lay wrapped in primitive solitude.

The first settlement and attempt at civilization on the western continent was made in Mexico, by the races of men whose origin is still a mystery. The Taltecs, who, in the year A. D. 700, first settled in this country, maintained a semi-civilization in Mexico for four centuries; from which period, for four additional centuries, (until 1521,) the Aztecs, and other tribes from the north, maintained a form of government, founded the city of Mexico, and erected the splendid temples and palaces from which the ambitious Spaniard, Cortez, in 1521, drove Montezuma and put an end to Aztec rule in Mexico.

Iceland, whose eternal glaciers stand sheer and cold, was the next part of America discovered, (if this dependency of Denmark can be called a part of America.) This event dates from the year 860, when the Norwegian pirate, Naddodr, was wrecked upon its shores. In 874 a colony of Naddodr's countrymen, seeking refuge from the tyranny of Harfager, founded a colony and established a republican government in these inhospitable regions; and with the introduction of Christianity in the year 1000, and the art of writing in 1057, the foundation of modern civilization was laid in the western world.

Greenland, discovered and settled about the same time as Iceland, had entered upon a career of civilization, and little doubt exists but that the Northmen, in making their voyages from Norway to Iceland and

Greenland, had frequently touched along the coast of New England; but these early northern colonies, after existing for four centuries, passed away, and, from 1404 until 1576, had almost gone from the memory of man and had to be rediscovered in 1721.

America still slumbered until 1492, when Columbus brought the new world into the family of nations. The newly discovered continent awaited a name, which the voyage of the ambitious Amerigo Vespucci, in 1499, furnished, he giving it his own Christian name.

Cabot, at Newfoundland, in 1497, and Columbus' voyages, were drawing attention to the Atlantic side of the continent. Alvarez de Cabral had made known his discovery of Brazil in 1501, but the waters of the great ocean west of America had not yet been seen by European eye; this was reserved for the Spanish adventurer, Balboa, who, in 1513, after making a journey into the interior of Darien, (Colombia,) was led to a high mountain by the natives, from a peak of which he first beheld the waters of the Pacific ocean. Clad in an armor of mail, with the royal flag of Spain, upon which was emblazoned Mary and the infant Jesus in her arms, and the crown of his sovereign, he waded deep into the water and exclaimed to his soldiers and followers, "*Spectators of both hemispheres, I call you to witness that I take possession of this part of the universe for the crown of Castile. My sword shall defend what my arm hath given to it.*"

Simultaneously with the entry of Cortez into Mexico in 1519, the Portuguese navigator, Magellan, then in the employ of the Spanish government, effected an entrance into the Pacific ocean through the straits now bearing his name. To this gallant navigator (slain at the Philippines, in 1520) are we indebted for the appropriate name of this vast ocean—Pacific.

Other navigators and explorers came. Cortez, having conquered Mexico, pushed westward to the Gulf of California in 1534, and, from that period up to 1540, the date of his final departure to Spain, had made several expeditions in the vicinity of Lower California. In 1535, Pizarro was asserting Spanish domination in Peru. The year 1542 found Cabrillo exploring the coast of California as far north as Cape Mendocino. Francis Drake, in 1579, was buffeting the north winds of the Pacific, and erecting the flag of monarchical England upon the shores of California; and 1602 found the Spanish navigator, Viscayno, exploring the lower coast of California and seeking shelter in the harbors of San Diego and Monterey. The first colonization of what is now the Republic of America was effected in Virginia, in 1607; and 1620 witnessed the Pilgrims landing on the shores of New England.

Lemaire and Schouten, the Dutch navigators, in 1615, had discovered Cape Horn. The Danish navigator, Behring, in the service of Russia, had, in 1727, discovered the passage between the continents of Europe and America, giving it his own name, and traversed the lonely shores of Alaska. The year 1764 found the English explorers, Willis and Carteret, navigating the North Pacific and establishing English dominion on the Pacific side of British Columbia. The famous Captain Cook had made his first voyage to the Pacific in 1768. The cross of the Jesuit fathers was first carried into California and planted at San Diego in 1769. The English navigator, Vancouver, in 1770, was exploring the Straits of Fuca and the island now called after its discoverer. Kenguelen, the French navigator, in 1772, was sailing in the waters of the North Pacific.

During all these eventful years, while, from Iceland to Patagonia and distant Alaska, America was being explored and settled, up to July, 1769, when Governor Portala first beheld the Bay of San Francisco, the vast region of California, its genial climate, rich soil, towering mountains, and mineral wealth, were all unknown to civilized man. No furrow had been turned in all her broad, rich valleys; no hand had touched her golden treasures; no keel had ruffled her placid waters; and, although her mighty Golden Gate had stood ajar since creation's dawn, the mystic seal that secluded her charms was still unbroken save by the wild birds, whose fleet course carried them uninterrupted through that portal destined to become one of the world's greatest commercial marts.

Man—civilized, educated man—had not yet asserted his dominion over this vast field; and, within all this broad land, a solitude, quiet, calm, and placid, through all the long months and years, reigned supreme, broken only by the whoop of the savage as he danced to his lengthening shadow beneath the tall pine tree.

From 1769 to 1846, Jesuits, Franciscan friars, Spanish and Mexican adventurers, amidst local revolutions and turbulent factions, had ruled and occupied California without effecting a permanent civilization or industry. Lingering shadows of Spanish superstition, crumbling walls of ancient missions, neglected graves, fragments of church bells that once, from the branches of sturdy oaks, called the red man to the foot of the cross, silently proclaimed the departure of a once semi-religious condition. Roving brigands, subsisting upon the semi-barbarous inhabitants, and revolutionary outbursts from whose leaders issued startling *pronunciamentos*, exhibited the lack of executive authority in the country, and the rapid decline of the last vestige of religious, social, and national power in the land. To redeem this degenerate people, found a new civilization, nationality, and freedom, required the quickening impulses of a social and national existence founded upon broader and more progressive principles than any yet known in the land.

At this critical period, when jealous monarchs of Europe were turning their eyes toward the chaos of California and contemplating a new field for American imperialism, the flag of the American Republic was hoisted over the Mexican territorial capitol at Monterey, and California entered upon a new era of advancement. But it required the opening of the treasure vaults of the Sierras and the loosening of the golden sands of the Yuba to set in motion the long lines of pilgrims across vast deserts and over the precipitous mountains, and to spread the sails of vast fleets seeking a channel through the Golden Gate. It required the cry of Gold! to break the links of the family circle and leave in a wreck behind the household gods, as man sought in the unfrequented ravines and gulches of the Sierras the treasures of the new El Dorado. The voice came, stern and potent, reaching the dwellings of civilized men in every corner of the globe; it echoed in the ears of the shrewd Yankee, muscular Celt, vivacious Gaul, bearded Turk, stalwart Polander, grim Russian, and polite Castilian. It was heard by the turbaned Moslem in his harem, the wandering Arab on his pilgrimage to

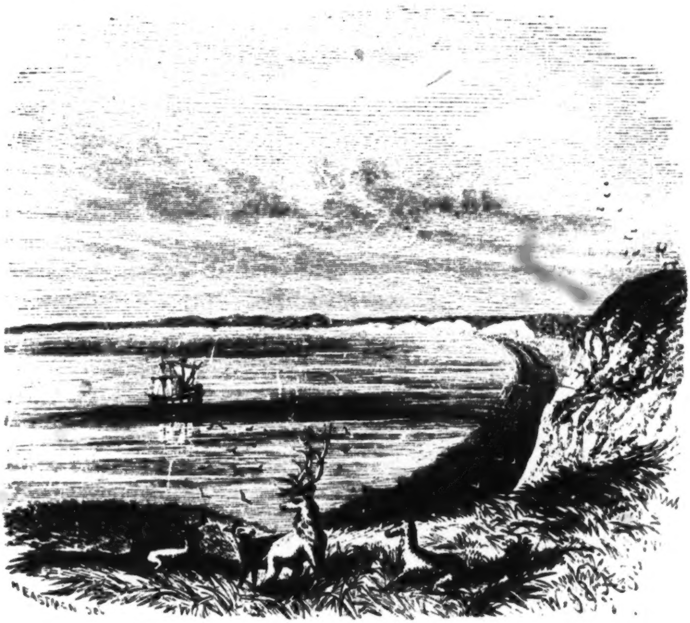
Mecca, the dreamy sons of the Flowery Kingdom as they wandered by the waters of the *Yang-tse-kiang*, or bent before *Tien-tan* to do homage to their prophet. The syren song of the enchantress was caught up by every kindred of men, who joined in the cosmopolitan throng to seek, by unknown channels, the shores of a land whose sands of gold and hidden mountain treasures, for the first time in the history of nations, had broken the seal of Oriental exclusiveness and brought into companionship, in voyages by sea and journeys by land, in intercourse of business and trade, the strange families of men whose complexions, costumes, and tongues startled and confounded each other.

# CHAPTER II.

First recorded history—Jesuits—Missions—Cortez' expedition—Exploration of the Gulf of California—Ulloa's expedition—Cortez returns to Spain—Cabrillo's expedition—Sir Francis Drake's expedition: he takes possession of California—New Albion—San Diego and Monterey discovered—The Golden Gate not yet discovered—Viscayno's voyage—Father Tierra's expedition: he takes possession of California in the name of the King of Spain—Conversion of the heathen—Father Ugarte's expedition—The Jesuits expelled—Franciscan missions established—Father Serra's expedition—Dominican friars in California—Voyage of the San Carlos and San Antonio—Loss of the San José.

THE first authentic account of California that we possess is derived from the records and writings of the early Spanish navigators. These, after having explored and settled the greater part of South and Central America, turned their attention to the exploration of the coast of Lower and Upper California; until, however, the acquisition of the country by the American government, in 1846, no permanent settlement had been made nor development of the country effected, with the exception of a few scattered missions established by the Jesuit priests for the conversion of the native population.

For more than three-quarters of a century previous to this period, frequent voyages had been made and expeditions fitted out by zealous Spanish adventurers, for the purpose of discovering the fabled treasures of California, which seemed not to be confined to silver and gold, but also to diamonds and other precious stones. Each expedition, however, failed either to discover the golden treasures of her mountains, or bring to light the splendid harbor of San Francisco.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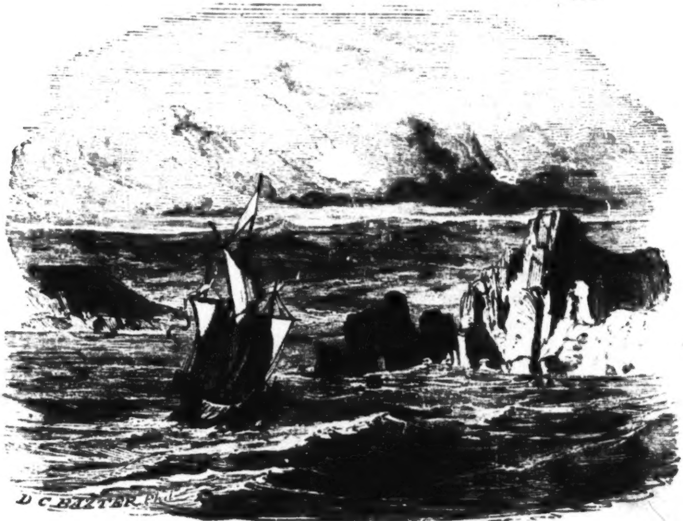
SIR FRANCIS DRAKE AT DRAKES' BAY CALIFORNIA, IN 1579.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SPANISH SHIP OF THE SEVENTEENTH CENTURY, OFF THE COAST OF CALIFORNIA.

Cortez, who, in 1521, completed the conquest of Mexico, turned his attention to the exploration of the coast of California. This he did under most unfavorable circumstances: he was compelled to build his vessels of raw material taken from the forest, and, without chart or guide, to explore a coast whose waters had hitherto been undisturbed by the navigator's keel. His explorations were confined chiefly to the west coast of Mexico and the Gulf of California. After many shipwrecks and mutinies of the crews, which rendered his explorations abortive, the pilot, Ximines, who had himself been a mutineer, landed, in 1534, on the east side of the peninsula of Lower California; after having surveyed the coast, he returned with encouraging accounts of the land he had discovered.

Later in the same year, Cortez in person, with four vessels, left Tehuantepec to explore further northward. He reached Lower California and explored a portion of it, his object being to found a Spanish colony; but so great were the sufferings of his party, and so hostile the Indians, that he soon returned to Mexico, leaving his object unaccomplished.

Still hopeful, however, of making rich discoveries toward the north, Cortez, in 1537, fitted out another expedition of three vessels under the command of Francisco de Ulloa. This officer, after exploring the Gulf of California, steered westward round the Cape of Lower California, and proceeded north to the twenty-ninth degree of latitude. At the end of a year's cruise he returned to Mexico with reports of a wretched, barren, and inhospitable region, much to the chagrin of Cortez, whose dreams of spice islands and of great mineral wealth now began to fade away. Three years later Cortez returned to Spain, having bade adieu to the American continent forever.

In the year 1542, Juan Rodriguiz Cabrillo, by birth a Portuguese, but at this period in the service of Spain, by directions of Mendoza, Viceroy of Mexico, sailed from the western coast of Mexico, on June 27, on a voyage of discovery and exploration. He kept his course westward along the coast of California to Cape Mendoza, (called after the viceroy; now Cape Mendocino,) and returned in the following April to Natividad, the place of departure, without having gained much knowledge of the country.

Francis Drake (afterwards Sir Francis Drake) sailed from England, in his good ship the *Golden Hind*, to make explorations in the Pacific, and, by right of discovery, add to the possessions of his countrymen. He was not aware that, thirty years before, Cabrillo had discovered and explored the coast of California. After preying upon the Spanish galleons in his track, from Magellan's straits to Panama, and robbing them of their treasure and precious cargoes, he headed north, along the California coast. After having proceeded as far north as the southern line of Oregon, being buffeted by northern gales, he was driven south, June, 1579, and sought refuge in an inlet near Point Reyes, a short distance north of the Golden Gate; here he remained thirty-six days. During this time he took possession of the country in the name of the Queen of England (Elizabeth,) calling it New Albion, and erected a monument commemorative of his act; upon this was "a plate nailed upon a fair great post, whereupon was engraven her majesty's name, the day and year of our arrival there, with the free giving up of the province and people into her majesty's hands, together with her highness' picture and arms in a piece of five pence of current English money, under the plate, where under was also written the name of our general." Drake was not aware that the Spaniard had taken possession of the country in the name of his sovereign, and planted the cross upon its shores.

The harbor that Drake entered was for many years supposed to be the Bay of San Francisco, but the strongest evidence seems to incline against this. The harbor in which he lay is in Marin county, a few miles north of the Golden Gate, and is still called Drake's bay; and in some of the old English histories of his discoveries the region of California is called "Drake's land back of Canada," and "New Albion."

After having lain in harbor thirty-six days, Drake set sail for England. He went by way of the Philippine islands and the Cape of Good Hope, thus making a complete circuit of the globe. He was the first navigator that ever accomplished such a feat, returning home in the same vessel in which he commenced the voyage.

Philip the III, King of Spain, anxious to retain the possession to which he was entitled by discovery, forwarded from Madrid to the Viceroy of Mexico in 1596 orders to explore and take possession of California in his name. In accordance with this command, General Sebastian Viscayno, in 1602, sailed from Acapulco with three vessels. He pushed his way against the prevailing north winds along the west coast of Lower California, surveying the ocean and coast as opportunity presented itself. On November 10, he reached as far north as the harbor of San Diego; here he lay at anchor ten days. Proceeding still north he reached, on the 16th of December, 1602, the Bay of Monterey; this name he gave it in honor of the Count de Monterey, Viceroy of Mexico. Viscayno next entered some small inlet in the coast a little north of San Francisco, and one of his vessels is supposed to have proceeded as far north as the Columbia river. But the splendid Bay of San Francisco was not entered by him, but to him, as to all the other Spanish navigators and Sir Francis Drake, the seal of the Golden Gate was still unbroken.

After this voyage of Viscayno, he went to Spain in hope of aid for the further prosecution of his explorations in California; however, although his report of the country was most flattering, he did not receive the necessary encouragement, and his records, maps, and charts being lost or destroyed, all about the expedition was forgotten; and, for more than a century and a half after his departure, San Diego and Monterey were unvisited. The whole country seemed to have passed from the recollection of civilized man; the red man alone was supreme in his animal life, hunting the deer and making his acorn and grasshopper pie, his shell money and flint-pointed arrow, encumbered by neither art nor fashion, other than a few feathers stuck in his hair and a few streaks of rude paint upon his cheeks and body, and in company with his squaw, who, minus chignon, high-heeled boots, and hoop-skirt, wandered in dreamy apathy over the rugged mountains, amidst the dense forests, through the beautiful valleys, and along the murmuring streams.

On the 25th of October, 1697, we find Salva Tierra, with a company of six soldiers and three Indians, pitching his tent at the Bay of San Dionysio, a little south of San Bruno, Lower California. Tierra was sent by the Society of Jesuits on a mission for the spiritual conquest of California; into this project the Viceroy of Mexico and the King of Spain entered with much interest, the latter being anxious to have the permanent possession of a country of whose riches much had been said by visitors.

In the powers granted to Tierra was added a commission from the King of Spain, which empowered the colonists to enlist soldiers at their own expense, and to appoint officers of justice in the new land; this, however, to be without putting the government of Spain to any expense, or drawing upon it for funds, without the express orders of the King: further, he was to take possession of the country and hold it in the name of his majesty. At Loreto, on the Bay of San Dionysio, Tierra planted his garrison and erected a little chapel; before its door he placed a crucifix, and in the name of the King of Spain took formal possession of the country on the 25th of October, 1697.

The Rev. Father Tierra, having established his mission, began his work of the conversion of the heathen; he collected them at his little chapel, where, after having endeavored to instruct them in the catechism and prayer, he fed the inner man with small portions of boiled maize. This was so much appreciated that when, on account of its scarcity, the pious fathers began to lessen the supply, the new converts gathered their tribes from far and near and conspired for the murder of the whole missionary band, ten only in number. These, however, successfully withstood the attack of over five hundred savages, and drove them in confusion from the mission. The continued kindness of the fathers, and the fact that a state of war would deprive them of their new luxury, soon drew the Indians around the cross; and the missionary work continued not only to maintain its footing but to make its way slowly through the peninsula.

In the year 1700, by the arrival of Father Ugarte from Mexico, a new impetus was added to the labors of the missionaries. He settled at St. Xavier, Lower California, with the prayers of Mary of Savoy and King Philip of Spain, that he might be prospered in diffusing Catholicism, accompanying him; but most likely better still than these, the supplies from Mexico, furnished by the indefatigable Father Kino, which, with the increase of cattle and sheep at the missions, brought some apparent success to the cause of the cross, to which concurring causes we may also add the habits of industry inculcated by Father Tierra on the native population.

All along, from the first discovery of the coast, California was supposed to be an island, and on the maps and charts was called *Islas Carolinas;* and not until Father Kino's expedition to the waters of the Colorado and across the Gulf of California, in 1702, was it determined that California was not an island, but a part of the mainland of the American continent, and that the Gulf of California ended at the mouth of the waters of the Colorado, leaving the land lying west of it a peninsula. But it required the expedition of Father Ugarte, in 1722, to fully settle the question, that the waters of the Colorado and the Gulf of California had no outlet except between the mainland of Mexico and Lower California. This expedition, made by the reverend father on board of his rude craft, *The Triumph of the Cross*, built on the shores of the Gulf of California for this express purpose, was the fullest and most thorough survey of the whole gulf and coast made up to that period.

Up to 1745, repeated massacres by the Indians, of the fathers of the missions, had, at times, almost depopulated the coast. At this time there were only sixteen small missions, all confined to the barren region of the peninsula of Lower California; still their beacon lights and fresh supplies of provisions to the famished and scurvied crews of the yearly galleon which, on her voyage from the Philippine islands to Panama, visited them, was no small part of their usefulness.

All the labors of piety, and efforts to utilize the native population by teaching habits of industry, were carried on by the untiring energy and zeal of the Jesuit fathers, at a large outlay of labor and money, together with sacrifice of comfort: the money was received by donations from the friends of the missions in Spain and Mexico. But all the labors and sacrifices of the early fathers were doomed to destruction. King Charles of Spain, jealous of the political influence of the Jesuit order throughout his dominions, in 1767, issued a decree expelling the whole order from his possessions. This was speedily executed both in Mexico and California: the missions, funds, and all were assigned to the Franciscan monks of Mexico, and the Jesuits themselves placed under their control, with Father Junipero Serra as president. Serra, on the 1st day of April, 1768, entered Loreto, the capital of the missions on the peninsula, and took formal possession.

Under the leadership of the energetic Father Serra, new life was infused into the missionary establishments on the peninsula. But soon another religious Romish order—that of the Dominican friars—was granted power by the King of Spain to enter the missionary field at the missions already established; sooner, however, than make a division of the labor with a rival organization, the Franciscans abandoned the entire field of the peninsula of Lower California, and started westward to found new missions and introduce civilization into Upper California.

The expedition, under the new order of things, made ample preparations for a permanent settlement. Companies of soldiers, with muleteers, herds, and flocks, were to proceed overland from Lower California, whilst two vessels, equipped and provisioned, were to proceed by sea as far north at least as San Diego.

About this time a new order was received in Mexico by the Vicar-general, from the King of Spain, to make a settlement at San Diego, and possess and hold the country. On this new enterprise, headed by Father Junipero Serra, the *San Carlos*, the first of the two vessels, commanded by Don Vicente Vilal, with sixty-two persons on board, sailed from Cape St. Lucas, Lower California, on the 9th of January, 1769, for San Diego. She was followed, on the 15th of the same month, by the *San Antonio*, commanded by Don Juan Perez; and, on the 16th of June, the *San José* sailed from Loreto. After nearly a four months voyage, the *San Carlos*, on the 1st day of May, arrived at San Diego; on the 11th day of April following, the *San Antonio* arrived at the same port, after a most perilous voyage and the loss of several of the crew by scurvy; but the ill-fated *San José*, after leaving Loreto, was never heard of.

THE GOLDEN GATE AND BAY OF SAN FRANCISCO, 1769.
(City of San Francisco built where the Deer are.)

MONTGOMERY STREET, SAN FRANCISCO, 1849.

## CHAPTER III.

Don Portala's expedition—First settlement established—Father Serra at San Diego—First chapel built—Discovery of the Bay of San Francisco—Founding of missions—San Carlos the first vessel that entered the Golden Gate—Native civilization—Spain and the Franciscan fathers—Wealth of the missions—Independence of Mexico—Government of California—Manumission of the Indians—Property of the missions confiscated—Departure of the fathers.

Don Gaspar Portala, Governor of Lower California in 1769, took command of one division of the overland expedition. This was intended to proceed from Lower California, advance northward as far as practicable, plant the cross, and establish the dominion of his majesty, the King of Spain. A second division was headed by Don Fernando Riveray Moncada. Father Crespi was in this division, which was composed of soldiers, muleteers, and Indians. These had with them two hundred head of cattle, and a number of horses and mules. On the 24th of March, 1769, they started from Villacata, Lower California; and, on the 14th day of May following, arrived at San Diego, where they, on the 1st day of July, 1769, established the first white settlement and mission in what is now the State of California.

In May, 1769, Governor Portala, with Father Junipero Serra and the second division of the overland expedition, left Lower California, and, after a journey of forty-six days, at the head of his expedition, arrived at San Diego on the 1st day of July, 1769. Great rejoicings and demonstrations ensued; the vessels discharged their guns, the soldiers their muskets, to celebrate the final meeting of the four divisions of this first expedition to permanently plant white settlements and establish civilization in Upper California. In a few days a mission was founded, a cross planted, a chapel built, a priest selected to preside, a patron saint named, the ground blessed and sprinkled with holy water, and every thing was made ready for the conversion of the heathen.

On the 14th day of July, 1769, Governor Portala started with a new expedition from San Diego to discover the Bay of Monterey and establish a mission. Priests, soldiers, muleteers, and Indians—in all, sixty-five—with provisions and pack-trains, set out on their northward journey. At Monterey they halted and planted a cross, but, not satisfied that it was the place of which they were in search, they proceeded still northward; and, on the 25th of October, 1769, came in sight of the sand-hills of the peninsula of San Francisco, with its beautiful bay stretching north and south a hundred miles, landlocked upon all sides save at the narrow entrance of the Golden Gate on the west. This is one of the finest harbors in the world, being surpassed only by that most beautiful sheet of water and harbor in Washington Territory, Puget sound.

To Governor Gaspar De Portala, then, must be awarded the honor of the discovery of the Bay of San Francisco and not to Sir Francis Drake: he, as we know from the best authority, never saw it; neither can it be assigned to Father Junipero Serra, who, with other missionaries, remained at San Diego during Portala's journey to San Francisco. Six years elapsed, after Portala's discovery, before Serra first beheld the Bay of San Francisco. This fact is well established by the writings of Father Palou, who kept the records of the missions at this period. Nor can the honor of its discovery be awarded to Friar Juan Crispi, who accompanied Portala. Portala named the harbor, after the founder of his monastic order, (Saint Francis,) San Francisco.

In about six months after Portala's discovery of the Bay of San Francisco, he and his party returned to San Diego. A mission was not founded at San Francisco for more than six years after. Father Portala having returned to Mexico, Father Junipero Serra was commissioned president of all the missions in Upper California. Under his directions, the missions at San Francisco were founded by Friars Francisco Palou and Bonito Cambou on the 9th day of October, 1776. Father Junipero Serra did not, as some have written, found the missions at San Francisco. Once only during his stay in California did he visit San Francisco; the period of his stay was short, extending from the 1st to the 10th of October, 1777.

Two years previous to this, in so far as is positively known, no keel of a vessel had ever ruffled the waters of the Golden Gate. This honor was reserved for the *San Carlos.* This ship, in June, 1775, entered the spacious harbor and explored the bay in all directions. She had been despatched from the lower country for the purpose of exploring the Bay of San Francisco, which had been discovered by land, and also for the purpose of seeing if it could be entered by the mouth or channel which Portala declared he had discovered on his visit in 1769.

The party which had founded the missions at San Francisco left Monterey (where a mission had been founded on the 3d of June, 1770) for that purpose on the 17th of June, 1776; and, travelling overland, reached the Bay of San Francisco on the 27th of the same month, and founded the missions as already stated.

With increasing supplies of provisions, seeds, cattle, horses, and sheep, the missionary fathers entered upon the holy work of the red man's conversion. This was the sixth mission, up to this period, founded in California. From this time until the year 1800—a period of twenty-four years—the fathers labored with great zeal and industry, and were able to report eighteen missions established and 647 savages converted to the cause of Christianity: *how far*, is not stated. With a stock on hand of 7,080 neat cattle, 6,238 sheep, 1,000 horses, and more than 5,000 bushels of grain raised per annum, matters seemed prosperous.

In the year 1802, the eighteen missions had an aggregate population of 15,562—7,945 males and 7,617 females. This of course included (besides the priests, soldiers, and Spanish) the Indians attendant at the churches, and supposed to be civilized. These missions were at the following places, and founded at the subjoined dates, and in the order following: San Diego, July 16, 1769; San Carlos de Monterey, June 3, 1770; San Antonia de Padua, July 14, 1771; San Gabriel, September 8, 1771; San Louis Obispo, September 1, 1772; San Francisco, October 9, 1776; San Juan Capistrano, November 1, 1776; Santa Clara, January 18. 1777; San Buenaventura, March 31, 1782; Santa Barbara, December 4, 1786; La Purisima Concepcion, December 8, 1787; Santa Cruz, August 28, 1791; Soledad, October 9, 1791; San José, June 11, 1797; San Juan Bautista, June 24, 1797; San Miguel, July

MISSION OF SANTA BARBARA, CALIFORNIA, FOUNDED IN 1786.

FATHER GARZES AND THE INDIANS IN CALIFORNIA, IN 1775.

25, 1797; San Fernando Rey, September 8, 1797; San Louis Rey de Francia, June 13, 1798; San Inez, September 17, 1804; San Rafael, December 14, 1819; and San Francisco de Solano, August 25, 1823: making in all twenty-one, up to the year 1823.

For the protection of the missions, military posts or presidios were established: one at each of the following places: San Diego, Monterey, Santa Barbara, and San Francisco. These enclosures were surrounded by adobe walls, nearly twelve feet in height, with chapel, officers' quarters, barracks, store-houses, &c. Little encouragement was given to colonization, and the priests watched officers and soldiers, none of whom were allowed to marry without a license from the King of Spain, which the fathers took good care was not too often granted. With the fathers the Indians seemed to be the great centre of attraction: they were a race who submitted unreservedly to their spiritual and temporal domination. They were good blacksmiths, farmers, tanners, weavers, soap-makers, herders of flocks, and tillers of the soil; and, under the leadership of their masters, had raised the missions to positions of importance, and the fathers themselves to opulence and power.

Whilst the fathers discouraged by all means the immigration of white settlers into California, and prohibited those under their control from marrying, they most anxiously desired to cultivate amicable and even conjugal relations between the Spaniards and Indians. As evidence of this we find that the first grant of land made in California was to Manuel Burton, a Spanish soldier, on November 27, 1775, for leading to the altar as his wife a native convert woman.

But all the precautions and teachings of the fathers were unavailing to raise the native Californian above the docile, half-idiotic wretch, who, destitute of ambition, hoped or thought of nothing beyond a supply of food to fill his ever-craving stomach; and so soon as the influence, care, and protection of his master were withdrawn, he relapsed into his native bestiality, forsook the cornfield and the loom, and returned to scour the shores for dead whales on which to gorge himself, or to roam upon arid plains to fatten upon acorns and grasshopper pie.

Conflicts and jealousies between the fathers and the military commanders of the presidios caused the Viceroy of Mexico to define their powers in 1773. The fates, however, seemed to have decreed the downfall of the missions, which occupied the fairest portion of the world, and whose rulers, having relapsed from their pristine energy and zeal, were leading a lazy, semi-barbarous life in superstition and apathy to earthly and heavenly things.

Spain already possessed by discovery and occupation the vast region of the American continent from Magellan's straits to the Columbia. The king became jealous of the power and influence of the missions, and determined on their suppression.

A long calm seemed now to hang over California, during which the Franciscan friars were complete sovereigns of the land. With the increase of flocks and luscious wines they grew lusty of body, easy of gait, docile in temper, mechanical in prayer, and moderate in zeal; and in their case, as in that of most other mortals, good dinners, well washed down with red wine, tended to abate the fervor of their devotion, and led their thoughts and actions toward the precious metals and gross things of earth. Accordingly we find that they, in 1835, shortly before their abandonment of the country, raised large crops of wheat, maize, barley, beans, grapes, and other products, amounting to more than one hundred thousand dollars per annum; this, too, at the very low prices of those times. We find them also in the possession of 216,727 horned cattle, 32,201 horses, 2,844 mules, 177 asses, 153,455 sheep, 1,873 goats, and 839 swine. Indeed, one of the fathers, Louis Martinez, is said to have taken to Spain with him when he left the country more than one hundred thousand dollars in treasure. Even all this wealth is supposed to be less than half of what the fathers possessed about the year 1822, before the Mexican authorities attempted to confiscate their property. The fostering care of the Spanish government and the Viceroy of Mexico, together with the contributions of the friends of religion, had lent character and power to the missions of California, and had swelled "*the pious fund of California*" to respectable proportions.

But all this power, splendor, and missionary labor were dashed to the ground by the fall of Spanish rule in Mexico; for, on the achievement of the independence of Mexico, in 1822, radical changes were wrought, both in the civil and ecclesiastical affairs of the country. The new empire not only laid claim to that vast territory then known as Mexico, but also to that limitless and undefined country so long claimed and partly settled by Spanish adventure—California. When Mexico became a republic, in 1824, this whole country was erected into a Mexican Territory, with a representative in

Congress, and military commandant at Monterey, the capital. The powers of the Franciscan fathers in California were soon curtailed by the Mexican Congress. In 1826, that body proclaimed the manumission of all the civilized Indians in California, with a division of the country into parishes, and allotments of land for the Indians. This measure, together with a failure on the part of Mexico to pay the allowances of the fathers, and the decline of the "*pious fund of California,*" caused missionary labors to decline. The Indians relapsed into their former barbarism, squandered their means, and became nude savages. The political party in power in the early part of 1833 passed laws confiscating the lands and property of the missions. These were subsequently revoked by Santa Anna, who came into power in the same year. By the sad and fluctuating changes of administration in Mexico down to the year 1845, the missions and fathers were embarrassed and harassed by acts of confiscation and abridgment of powers. In 1845 came the final blow: many of the missions were sold at auction; others were rented, the rents to be divided into three funds—one-third to go to the missionaries, a third to a *pious fund of California* for charitable and educational purposes, and a third to the support of the civilized Indians. The fathers returned either to Mexico or Spain; and, in a brief period from this, the once powerful missions of California, their pious priests and praying Indians, were known only as things of the past; and to-day no trace of their former presence is to be seen in the whole land, except an occasional dilapidated and crumbling adobe wall, the fragments of some cathedral bell, the declining cross as it droops in melancholy solitude in the midst of the buried dead, whose history, like their mortal remains, is wrapped in its narrow grave beneath the rank grass and wild brier.

California, under the absolute rule of Spain for fifty years and under the rule of Mexico for twenty-four years, made but little progress either in material, social, or moral development; and, at the time when it fell into the possession of the United States, was almost as unknown, uninhabited, and undeveloped as it was when Cortez first attempted its exploration in the sixteenth century.

## CHAPTER IV.

Republican government in Mexico—American flag hoisted at Monterey—France and England seek to possess California—De Mofra's explorations—Russians in California—Revolution: a Yankee in it—Monterey captured by Alvarado and Graham—California declared a free State—Vallejo military chief—Religion established by law—Mexican authority again recognized—Graham and others banished—Commodore Jones declares California a part of the United States in 1842—Revolution of 1844—Castro General-in-chief—Banishment of Governor Micheltorena.

With the dawn of republican government in Mexico commenced a new era of importance in California. The rule of Spain was forever annihilated in the western provinces, and this was heartily acquiesced in by the Spanish inhabitants in California. One of the first acts of the Congress of the Mexican republic was the passing of laws encouraging immigration into their western territory, so that, simultaneously with the decline and disappearance of the Franciscan fathers and their missions, the settlement of the country by Mexican immigrants and a few wandering foreigners was begun. The latter class consisted chiefly of seafaring men, who settled about the ports and bays, and straggling seamen who left the ships which occasionally touched at the ports along the coast, and of one or two solitary merchants. This portion of the new population was regarded with a jealous eye by the Mexican and Spanish settlers. The class, however, which engaged the special attention and roused the jealousy of the native population consisted of the few Americans now settling in the country.

California, although distant from the seat of American and European civilization and political strife, was not tranquil nor entirely unknown previous to this period. Repeated outbreaks among the native and immigrant population kept pace with the ever turbulent state of affairs in Mexico; and, besides, many foreign nations had longed for her possession. France had an eye upon this distant land, and, regardless of the claims of Spain or the assumption of England, despatched, in 1841, from the French legation in Mexico, M. Duflot de Mofras, a scientific and accomplished gentleman, to make explorations in California. For two years De Mofras having occupied himself in the work of investigation, sent to his government a detailed account of the country, the Bay of San Francisco, the political condition of California, the designs of Europe and the United States upon it, and concluded it with the following statement, "That it is perfectly clear that California will belong to *whatsoever* nation will take the trouble to send there a ship of war and two hundred soldiers."

For a brief period the Russians had a feeble foothold in California; but it is doubtful if they ever had any intention to subjugate it or permanently settle in it. Those who came to it came to supply with agricultural products the Russian American Fur Company in the cold regions of the northwest. In 1812, they established themselves at Bodega bay, in Sonoma county, about sixty miles north of San Francisco. A few years later, they established another small settlement thirty miles north of Bodega, at a place called Ross. At these places they kept up small establishments and forts, to protect themselves both from the Spanish settlers and the Indians. The former always manifested the greatest jealousy and dislike toward them. After an occupation of thirty years, they, in 1841, sold their property and left the country. Of Russians there were about eight hundred, and a large number of Kodiak Indians; all of whom sought their homes in the far-off northern climes, turning their backs on the sunny land where they had trapped the beaver and the otter, and worshipped before the cross of the rude Greek church.

About the year 1836, jealousies springing up between the Mexican authorities in the territory, the monotony of affairs was disturbed, and occasionally a revolution broke out. A serious misunderstanding had existed between Angel Ramirez, a Mexican, and chief official of customs, and Juan Bautista Alvarado, second officer, and a native of California of Spanish descent. Alvarado's arrest being ordered by Ramirez, he fled, and found refuge in the cabin of Isaac Graham, in the mountains of Santa Cruz. Graham had many years previously wandered across the Rocky mountains as a trapper, and had pitched his tent here. He was a Yankee—at least an American, from the State of Tennessee; and, being ripe for adventure, on hearing of Alvarado's wrongs, in conjunction with him he concocted a scheme for the overthrow of Mexican authority in California, and the proclaiming of California a free and independent State. In a few days, Graham, at the head of a force of fifty riflemen, and Alvarado and José Castro, with one hundred native Californians, started upon their mission, supplied with ammunition from American vessels on the coast. They by night entered Monterey, the capital of the Territory, seized and made prisoner the Governor, Nicolas Gutierrez, and with him two or three hundred soldiers. Gutierrez at first made some show of resistance; but the crash through the roof of the presidio building of a four-pound shot soon brought him to his senses.

He surrendered what he could no longer keep. This was, indeed, the only shot fired during the revolution.

Alvarado and Castro were now in undisturbed possession of the capital. California was declared a free and independent State, with Alvarado at the head of civil and Guadalupe Vallejo at the head of military affairs. The Mexican Governor, Gutierrez, with all the Mexican officers and soldiers in California, was banished, a republican government established, and the Catholic religion secured by prohibiting the *exercise* of any other form of worship.

Alvarado, after meeting with some opposition to his rule from a portion of the native Californians, was recognized, and appointed Governor of California, by the Mexican government; and California having again submitted to Mexican rule, was divided into two districts with territorial governments, Senor Peña being prefect of the south and José Castro of the north. Alvarado held his position as governor until 1842.

Graham and the other foreigners who had assisted in elevating Alvarado to power, having by this time become obnoxious to him, were arrested and sent as prisoners, some to Monterey and Santa Barbara, and the most dangerous to Mexico. This event was celebrated by a solemn mass and great rejoicings, the prospect of being rid of the adventurous foreigners and the dangerous Yankees being so encouraging. But Alvarado's treachery in this matter failed to accomplish its object; for, in July, 1842, the exiles returned to Monterey on board of a Mexican vessel, at government expense. For this they were indebted to the kind and noble efforts of the English consul and other foreign dignitaries in Mexico.

Dissensions were now rife between the civil and military authorities in California, and in August, 1842, General Manuel Micheltorena arrived at San Diego from Mexico, with full powers from the government to supersede Vallejo in the military and Alvarado in the civil affairs of California. Micheltorena was received by the people with great rejoicing: bull-fights, fandangos, and other entertainments attested the joy of the populace. But, in the midst of their festivities, all was brought to a standstill: the irrepressible Yankee had entered upon a new *role* in California. Commodore Jones, of the United States navy, having been hovering about the coast of California, learned in some way that difficulties existed between the United States and Mexico with reference to Texas, which difficulties were likely to lead to the annexation of Texas and California, if not of Mexico itself. The gallant commodore, believing that it was the desire of his government, with the United States frigate *United States* and sloop-of-war *Cyane*, on the 19th of October, 1842, entered the port of Monterey, hoisted the stars and stripes, took possession of the capitol, and proclaimed California a part of the American republic. Alvarado, who had not yet been displaced by Micheltorena, surrendered to Jones on the following day. Jones' authority, however, was brief; for, on the day after the surrender, having had information which led him to believe that his acts were premature, and not in conformity with the wishes of his government, he hauled down his banners and quietly departed, having offered apologies for his intrusion. The new commandant, General Micheltorena, thereupon entered upon his duties unopposed.

But difficulties were not yet ended. General Vallejo and Governor Alvarado being now deposed, having been bitterest enemies, became firm friends, and with General Castro entered upon a new enterprise, into driving Micheltorena out of the country. All the ammunition of the government was stored at San Juan: upon this point the attention of the new revolutionists was directed. In November, 1844, Castro entered the town, captured the mission and the government ammunition. The governor afforded the rebels eight days grace in which to disband and surrender to his authority; but the rebels, regardless of this courtesy on the part of Micheltorena, marched upon the capital. The Mexican military force in the territory was small; and Micheltorena, fearing defeat, called for aid from John A. Sutter, who had been a foreign resident of the country ever since 1839. Sutter responded, and with one hundred mounted men, mostly foreigners, hurried to the rescue. Castro at the head of the rebel band, on the 21st of July, 1845, met the government forces a short distance from Los Angeles, where an engagement took place lasting two days, resulting in the killing of four persons and the unconditional surrender of the government forces.

Once more California was an independent country. The champion of the conquest, General Castro, was now General-in-chief; and Pio Pico, Governor. Micheltorena, together with his officers and soldiers, were shipped to San Blas on board of an American vessel; and Mexican rule ended in California, as the like fate befell the rule of Pico and Castro, as will appear in the succeeding chapter of this volume.

# CHAPTER V.

Early navigators—Voyage of Sir Francis Drake—Voyages of Sebastian Viscayno and Vistus Behring—Settlement of Sitka—King George's Sound Company—East India Company—Thomas Jefferson's interest in the Pacific coast—Expedition of John Ledyard: he is arrested by order of the Empress of Russia—Voyage of Vancouver—The King of Spain forbids Captain Cook to enter California—First American vessels on the Pacific coast—Captain Gray discovers the Columbia river—First American vessel enters the Bay of San Francisco—John Brown and Thomas Raben first Americans in California—Trade to the Columbia river—Count Rosanoff in California—*Delia Byrd* enters San Diego—Russians evacuate California at the request of the United States—Expedition of Lewis and Clark—First settlement in Oregon—John Jacob Astor founds Astoria—Fur trade of Oregon—The British take possession of Oregon—Its restoration to the United States—Astor's fur trade in the Rocky mountains—First overland journey to California—Arrest of Jedediah Smith—Letter from American seamen in 1826—Letter from Smith to one of the fathers—Death of J. S. Smith—Pattie's expedition—Asiatic emigration encouraged—First settlers in California—First mercantile house in California—Commodore Wilkes' expedition to the Pacific—Discovery of a wrecked Japanese junk—Fremont's explorations—Sutter's hospitality—End of Fremont's second exploration.

THE period which elapsed from the first Anglo-Saxon voyages to the Pacific coast to the discovery of gold forms one of the most interesting chapters in our history. The solitude and primitive order of the vast territory of Alaska, Washington Territory, Oregon, and California were unbroken, save by an occasional adventurer; and California was as little known to the world as the fabled garden of Eden.

Among those who broke the seal of its primitive obscurity on our coast was Sir Francis Drake, who, in 1558, made a voyage to California in the course of his explorations in the Pacific, also General Sebastian

MISSION OF SAN CARLOS, MONTEREY COUNTY, CALIFORNIA; FOUNDED JUNE 3, 1770.

Viscayno, who, under orders of Philip III of Spain, explored California in 1803, where at Point Reyes he discovered the wreck of Sebastian Cermenon's vessel, stranded in 1595 on her voyage from Manilla to Acapulco; and Vistus Behring, a Dane, who was employed by Catharine of Russia to make explorations in the North Pacific and on the coasts of Asia and America.

The founding of Sitka, in 1805, by the Russian American Fur Company, which was organized in 1799, and the founding of the King George's Sound Company, organized in London in 1784, with the object of making settlements on the Pacific coast, aided much in developing the country. Between the years 1784 and 1790 the East India Company (English) had despatched several ships to this coast. Thomas Jefferson, acting United States minister in France in 1785, took a lively interest in matters pertaining to the Pacific coast. A Connecticut Yankee, named John Ledyard, who accompanied the famous English navigator, Captain Cook, on his last voyage to the Pacific, conceived the idea of exploring the west coast of America. After several ineffectual efforts to secure aid either from the United States Congress or the British government, he went to France and had an interview with Thomas Jefferson, then United States minister in that country, at whose suggestion he undertook a journey across the country to Kamtschatka, thence by sea to Nootka sound or some other point on the west coast of America, thence overland to the Atlantic States. Permission was obtained from the Empress of Russia for Ledyard to pass through her dominions. He proceeded as far as Irkoutsk, in Siberia, on his way to Okhotsk, where he designed to take passage for the American continent.

Here he was, on the 24th of February, 1788, arrested by order of the Empress of Russia. After being conveyed to the frontier of Poland, he was released, with the injunction never again to set his foot upon Russian territory. Ledyard soon undertook an expedition to explore the source of the Nile; and died at Cairo in Egypt, November 15, 1788

The English navigator Vancouver, who visited the coast in 1793, and spent some time in the Bay of Monterey, contrary to Spanish custom, at least on the Pacific, met with a kind reception and received courteous attentions from the Spanish authorities at that place.

The jealousy of the Spanish toward all foreign intercourse was manifest upon all occasions. The Viceroy of Mexico, on the 23d of October, 1776, wrote to the Governor of California as follows: "That the king, having received intelligence that two armed vessels had sailed from London, under the command of Captain Cook, bound on a voyage of discovery to the southern ocean and the northern coast of California, commands that orders be given to the Governor of California to be on the watch for Captain Cook, and not permit him to enter the ports of California."

Yankee enterprise was seeking wider fields for its operations, and the Pacific was attracting attention. In the summer of 1787, Messrs. Barrell, Bulfinch & Co., merchants, of Boston, Mass., fitted out two vessels and despatched them to the Pacific, with directions to proceed as far north as King George's sound. One of these vessels, the *Washington*, ninety tons, was commanded by Captain Robert Gray; the other, the *Columbia*, two hundred tons, was commanded by Captain John Kendrick. A resolution had previously passed

Congress that these vessels be granted sea letters of safety by the Federal government, which was done; besides this, the State of Massachusetts issued passports to them, and letters from the Spanish minister in the United States was obtained, introducing the captains to the Spanish officials on the Pacific coast, which latter accounts for Governor Fages' letter to the commandant at the presidio of San Francisco, wherein we have the first mention of an American vessel on the Pacific coast. Both vessels left Boston on the 30th day of September, 1787; and on the 17th of September, 1788, the *Washington* reached Nootka sound, and in a few days the *Columbia* arrived at the same place. Captain Gray subsequently commanded the *Columbia*, and on board of her discovered the Columbia river. Among other articles on board these vessels, intended for trafficking with the natives of the Pacific coast, was a quantity of copper coins, issued by the Commonwealth of Massachusetts; some of which were discovered half a century later among the natives on the coast.

Following is a letter from the Governor of California to the commandant of the presidio at San Francisco, respecting the *Washington* and *Columbia:*

> "Whenever there may arrive at the port of San Francisco a ship named the Columbia, said to belong to General Washington, of the American States, commanded by John Kendrick, which sailed from Boston in September, 1787, bound on a voyage of discovery to the Russian establishments on the northern coast of this peninsula, you will cause the said vessel to be examined with caution and delicacy, using for this purpose a small boat which you have in your possession, and taking the same measures with every other suspicious foreign vessel, giving me prompt notice of the same.
>
> "May God preserve your life many years.
>
> "PEDRO FAGES.
>
> "SANTA BARBARA, *May* 13, 1789.
> "TO JOSEF ARGUELLO."

The ship *Columbia* alluded to was now under command of Captain Robert Gray, which sailed upon a second voyage in search of traffic among the natives, and arrived at the Straits of Fuca, June 5, 1791. Captain Gray, on his expedition, in trading down the coast with the natives, on the 7th of May, 1792, three years after the mention made of him by Governor Fages of California, discovered and entered the Columbia river, to which he gave its name, after his ship, which was the first vessel that ever entered that river, and from which Gray set sail homeward on May 20, 1792. Captain Gray, with reports of his discovery and a valuable cargo of furs, returned to Boston, without touching at any of the ports of California.

Expeditions from Boston were soon inaugurated for settlement and trade upon the Columbia; and from this period American vessels, at intervals, visited the coast, but their trade was chiefly confined to the Columbia river and the distant whale-grounds in the North Pacific.

José Argüello, the commandant of the presidio of San Francisco, on the 26th of August, 1803, writes to Governor José Joaquin de Arrillaga as follows:

> "That, on the first of the present month, at the hour of evening prayers, two American vessels anchored in the port, (San Francisco,) one named the *Alexander*, under the command of Captain John Brown, and the other, named the *Aser*, under the command of Thomas Raben; that, as soon as they anchored, the captain came ashore to ask permission to get supplies of wood and water, when, observing that he was the same Brown that was there in the preceding month of March, he refused to give him permission to remain in port; that, on the day following, at six in the morning, he received a letter from the captain, (or supercargo,) a copy of which he transmits, which is as follows:

"PORT OF SAN FRANCISCO, *August* 12, 1803.

"*To the Senor Commandante of the port:*

"Notwithstanding your order for our immediate departure from this port, I am constrained to say that our necessities are such as to render it impossible for us to do so. I would esteem it a great favor if you would come aboard and see for yourself the needy circumstances in which we are placed; for, during the whole of the time we have been on the northwest coast, we have had no opportunity of supplying ourselves with wood and water, the Indians being so savage that we have not been able to hold any kind of friendly intercourse with them whatever."

The letter continues at considerable length, detailing a long cruise of the vessels upon the northwest coast with several encounters with Indians. After detailing the reports of the capture of the ship *Boston* by the Indian chief Quatlazape, on his travels through the Straits of Juan de Fuca, the massacre of all the crew save two, and the beaching and burning of the vessel, it concludes as follows:

"This is all the account I am able to give of the matter, and I pray you, in the name of God, to come aboard our ship and see the needy circumstances in which we are placed, destitute of wood and water, and our vessel needing repairs. Trusting in your Christian charity, and that of your nation, we hope to be permitted to remain in this port the time necessary to obtain supplies and make repairs, since otherwise we shall certainly lose our ship.

"God preserve your life many years.

"JAMES ROWAN."

After the discovery of the Columbia by Captain Gray, the next vessel that entered that river is supposed to have been the brig *Jennet*, Captain Parker, of Bristol, Rhode Island, in the summer of 1792. On the 20th of October of this year, the *Chatham*, of the British navy, commanded by Captain Broughton, entered the Columbia and explored it in small boats, leaving on the

10th of November following. From this period until 1805, twelve vessels had entered the Columbia river, all of which were fitted out and sailed from Boston, except one, the *Juno*, of Bristol, Rhode Island.

As early as March 14, 1803, the brig *Delia Byrd*, Captain Cleveland, of Salem, Mass., arrived at San Diego; and, in 1807, the ship *Juno*, already mentioned, having been sold to the Russians at Sitka, entered the Golden Gate, having on board the Russian ambassador to Japan, Count Von Resanoff. While in California, the count was so delighted with the country that he arranged for the founding of a Russian settlement at Bodega bay, in Sonoma county. This location was made in 1812; and, in 1820, another settlement was established at Fort Ross, in the same county. The Russians had subsequently a settlement also on the Farallones; but Count Resanoff never returned to California, being accidentally killed in Siberia by a fall from his horse.

The English government, desiring to acquire California, offered serious objections to the Russian settlements in it; and the Mexican authorities, fearing that they did not possess the ability to dislodge them from the formidable forts, appealed to the United States government to request their removal, in compliance with the treaty stipulations of April, 1824, between Russia and the United States, that the former would not permit her subjects to make settlements south of latitude 50° 40′ on the Pacific. Uncle Sam came to the rescue; made a demand that the Russians evacuate; and in 1841 the imperial eagles of the Czar took their flight northward to Alaska. One of the brass guns of the Russian company in California is now in the pos-

FRONTIER FORT.

session of the Pioneer Society in San Francisco; others, with other property, were sold to Captain Sutter on the departure of the company, and the remainder were included in Seward's recent purchase of the Czar's possessions in North America.

Perkins, Lamb & Co., and Lyman & Co., of Boston, were the principal parties in fitting out vessels for the early traffic on the northwest coast. The expedition of Lewis and Clark, under the direction of President Jefferson, to explore the Columbia, which left the Atlantic side in 1804, arrived at the Columbia, November 15, 1805; and in March, 1806, started on their homeward march, to report to their government the result of their expedition.

During the years 1806–9, ten vessels, fitted out from Boston by the enterprising firms of Thomas Lyman, Perkins, Lamb & Co., and Lyman & Co., entered the Columbia; and, in 1810, the *Albatross*, from Boston, Captain T. Winship, entered the Columbia. The captain located a post, and planted a garden, at Oak Point, on the Columbia. This was the first settlement made in Oregon.

In this year a new stimulus was given to the commercial interests of the Pacific coast. John Jacob Astor, of New York, in connection with Wilson P. Hunt, of New Jersey, and others, organized the Pacific Fur Company. In September, 1810, the ship *Tonquin*, with the stores, officers, employés, &c., of this company, sailed from New York, and arrived at the Columbia on the 24th of March, 1811, and established themselves on the southern bank near the mouth, which they named, after the founder of the company, *Astoria*. Astor and Hunt admitted into the company Messrs. McDougal, McKay, and Robert and David Stewart, who, at the head of eleven clerks, thirteen Canadian voyagers, and five mechanics, entered upon a most lively and profitable fur-trade. A garden was planted, started by planting twelve potatoes, (all they had,) and an American settlement was commenced.

On the 5th of May, 1812, the ship *Beaver*, twenty guns, Captain Sowls, by way of the Sandwich islands, with additional supplies, and having on board Mr. Clark, six clerks, and twenty-six Kanakas, arrived to join Astor's company on the Columbia.

News of American occupation of Oregon reaching the British authorities and the members of the Northwest Fur Company, (a company established by charter of Louis XIII, of France, in Acadia, Nova Scotia, in 1630, and whose existence and legality were acknowledged by the British government on the transfer of Acadia to England by the treaty of Utrecht, in 1714,) they became alarmed at the encroachments of Americans in such close proximity to the northern British American boundary, then undefined and uncertain. This fur company despatched from Canada Mr. David Thompson, as their agent, to the Columbia river, where he arrived July 15, 1813, and located at Astoria. His object was to supplant Astor and his American interests, and obtain possession of the country and its fur trade.

Messrs. Hunt, McKenzie, McClellan, and Crooks, members of the Pacific Fur Company, with sixty men, had left the Atlantic States, crossed the country, and, after great peril and the loss of many of their comrades, arrived at Astoria, January 28, 1812. In August, 1812, Mr. Hunt, on board the *Beaver*, made a voyage to the Russian settlements of Alaska for the purpose of trade; thence to the Sandwich islands, from whence he despatched his ship to China, and remained at the Sandwich islands until June, 1813, when the *Albatross*, on her way from Canton, brought him the news of the war between Great Britain and the United States, and that the company's ship *Beaver* was at Canton, blockaded by an English war-ship. Mr. Hunt, on board the *Albatross*, sailed at once for the Columbia river, where he arrived August 4, 1813. Here he found things changed: his resident partners at Astoria, who managed the business in the interior, were British subjects, and were desirous to sell the rights of the company to the Northwest Fur Company. Hunt, on the *Albatross*, soon departed for the Sandwich islands. At Washington islands he met the United States frigate *Essex*, Commodore Porter, from whom he learned that the British intended to seize all the American property on the Pacific. At the Sandwich islands he chartered the brig *Pedler* and started back to Astoria, where he arrived in February, 1814, only to learn that immediately after his departure from Astoria, in August, 1813, Mr. McTavish, an agent of the Northwest Fur Company, with a number of employés, had arrived at Astoria, and that his partners had, on the 16th of October, 1813, sold out the American Pacific Fur Company to the Northwest Fur Company, and had themselves joined that company and thrown all their influence into it. Thus, by the duplicity of the British subjects in the Astor company, and without the knowledge or consent of its founder and head, they turned over to the Northwest Fur Company, at a nominal sum, that prosperous concern, which in so short a time (two years) had laid the foundation of American settlement on the Pacific coast, and the princely fortune of its projector.

The British, in possession of the fur company and Astoria, changed its name to their patron saint, and called it Fort George. On December 1, following, the British sloop-of-war *Raccoon*, Captain Black, arrived at Astoria, and landed a troop of British soldiers. Black took formal possession of the place, lowered the American flag, and placed in its stead the cross of St. George; and thus Oregon was in possession of the British, which they formally held until the 6th of October, 1818, when, by order of the Prince Regent of England to the North American Fur Company, under date of January 27, 1818, to deliver the territory to the American government, it was restored by the following article:

> "We, the undersigned, do, in conformity to the first article of the treaty of Ghent, restore to the government of the United States, through its agent, J. P. Provost, Esq., the settlement of Fort George, on the Columbia river.
>
> "Given under our hands in triplicate, at Fort George, (Columbia river,) this 6th day of October, 1818.
>
> "F. HICKEY, *Captain H. M. Ship Blossom.*
> "J. KEITH, *of the N. W. Co.*"

On the restoration of the territory, the stars and stripes once more floated over Oregon.

In 1821, the North American Fur Company and the Hudson Bay Company consolidated, under the name of the Hudson Bay Company, in which capacity they continued in Oregon and Washington Territory until a very recent period.

On the disbandment of the Pacific Fur Company, (Astor's,) a number of the employés of the company embarked in trading and independent trapping, some of whom found their way to California. Astor, however,

MUD VOLCANO, YELLOWSTONE REGION, WYOMING TERRITORY.
(Line of the Northern Pacific Railrod.)

LOWER FALLS OF THE YELLOWSTONE, WYOMING TERRITORY,
(350 feet in height. Line of the Northern Pacific Railroad,)

did not abandon the fur trade; but, in connection with W. H. Ashley, in 1823, formed a second North American Fur Company, extending its operations in the direction of the Rocky mountains; and, in 1824, established a post near Salt lake. In 1826, this company had in its employ over one hundred men in the Rocky mountains and on the Green river.

During this period a company known as the Rocky Mountain Fur Company was trading in the mountains, and pushed its operations into California, and as far north as the Umpqua river in Oregon. The members of this company were Messrs. Jackson, Sublette, Smith, and others. The overland journeys up to this date were all made to Oregon: as yet, the foot of the white man had never entered California by the overland route, until the Smith above alluded to, in the spring of 1825, found his way into California, and who is entitled to the honor of being the earliest overland pioneer of California. In July, 1825, he established a post near the present town of Folsom, and entered upon his business of trapping. Smith, in October of this year, left his company on the American river and started east to report to his partners on Green river. In May, 1826, in company with several others, he again set out for California. On his way, at the Mohave settlements on the Colorado, all the party except Smith and two others were killed by the Indians.

Smith and his two companions, Turner and Galbraith, on entering California, in December, 1826, in the lower part of the State, were arrested on suspicion of having designs against the government, and carried to the presidio at San Diego, where the commandant of the territory, Governor Echandia, interrogated them upon their intentions and business in California. The following letter from the officers of American vessels then on the coast had the effect of releasing Smith and his companions, securing them a passport permitting them to pursue their journey toward the Columbia river in Oregon:

"We, the undersigned, having been requested by Captain Jedediah S. Smith to state our opinions regarding his entering the province of California, do not hesitate to say that we have no doubt in our minds but that he was compelled to for want of provisions and water, having entered so far into the barren country that lies between the latitudes of forty-two and forty-three west that he found it impossible to return by the route he came, as his horses had most of them perished for want of food and water. He was, therefore, under the necessity of pushing forward to California, it being the nearest place where he could procure supplies to enable him to return.

"We further state as our opinions that the account given by him is circumstantially correct, and that his sole object was the hunting and trapping of beaver and other furs.

"We have also examined the passports produced by him from the Superintendent of Indian Affairs for the government of the United States of America, and do not hesitate to say we believe them to be perfectly correct.

"We also state that, in our opinion, his motive for wishing to pass by a different route to the head of the Columbia river on his return is solely because he feels convinced that he and his companions run great risk of perishing if they return by the route they came.

"In testimony whereof, we have hereunto set our hands and seals this 20th day of December, 1826.

"WM. G. DANA, *Capt. of Schooner Waverly.* [L. S.]
"WM. H. CUNNINGHAM, *Capt. of Ship Courier.* [L. S.]
"WM. HENDERSON, *Capt. of Brig Olive Branch.* [L. S.]
"JAMES SCOTT. [L. S.]
"THOS. M. ROBBINS, *Mate of Schooner Waverly.* [L. S.]
"THOS. SHAW, *Supercargo of Ship Courier.*" [L. S.]

Smith, with his companions, except Turner and Galbraith, who remained in California, started upon their northward journey; but winter coming on, they met with great difficulty in pursuing their course, and, after several ineffectual attempts to cross the mountains, were forced to retreat to the valleys for shelter and sustenance. Here Smith again found himself in trouble: his presence appeared before the "holy fathers" like a terrible apparition, filling them with terror, and they again demanded an explanation; and poor Smith, reduced to extremities sufficient to arouse sympathy in the heart of a pagan, pours forth his sad story to Father Duran, then stationed at San José:

LETTER FROM CAPTAIN JEDEDIAH S. SMITH TO FATHER DORAN.

"REVEREND FATHER: I understand, through the medium of one of your Christian Indians, that you are anxious to know who we are, as some of the Indians have been at the mission and informed you that there were certain white people in the country. We are Americans, on our journey to the River Columbia. We were in at the Mission San Gabriel in January last. I went to San Diego and saw the general, and got a passport from him to pass on to that place. I have made several efforts to cross the mountains, but the snows being so deep, I could not succeed in getting over. I returned to this place (it being the only point to kill meat) to wait a few weeks until the snow melts, so that I can go on. The Indians here also being friendly, I consider it the most safe point for me to remain until such time as I can cross the mountains with my horses, having lost a great many in attempting to cross ten or fifteen days since. I am a long ways from home, and am anxious to get there as soon as the nature of the case will admit. Our situation is quite unpleasant, being destitute of clothing and most of the necessaries of life, wild meat being our principal subsistence.

"I am, reverend father, your strange but real friend and Christian brother,

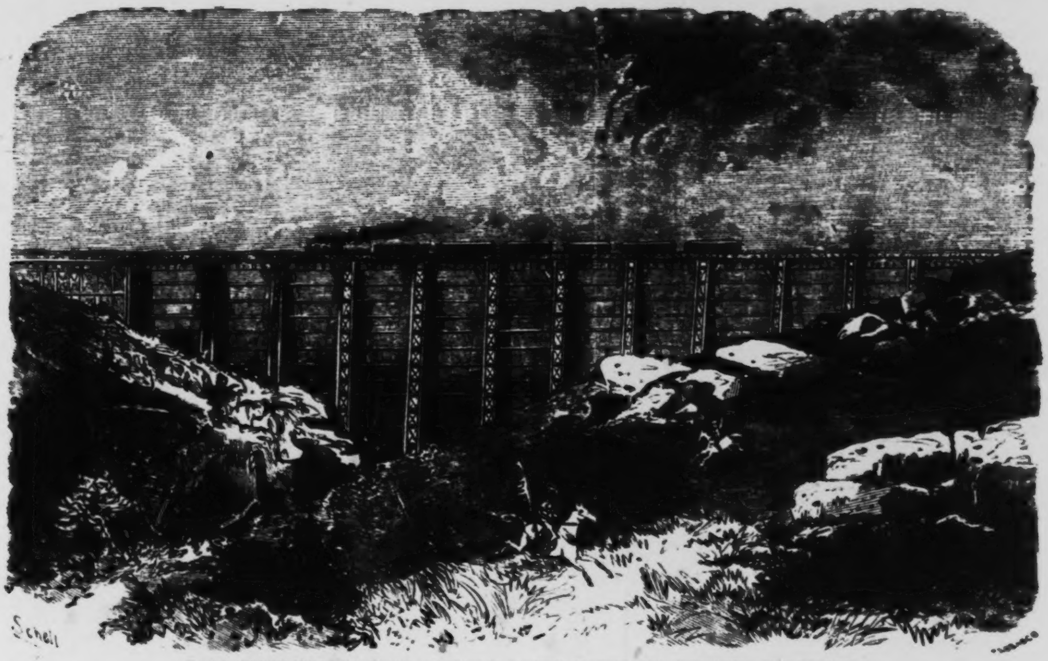
"J. S. SMITH.

"*May* 19, 1827."

Smith and his party, in the summer of 1827, pursued their journey northward, when, arriving at the mouth of the Umpqua river, in Oregon, the whole company, except Smith, Daniel Prior, and Richard Laughlin, were murdered by the Indians, who carried their packs of valuable furs to the Hudson Bay Company, where they sold them. With his remaining companions, Smith pushed northward, and finally reached Fort Vancouver, on the west side of the Columbia river. He subsequently returned to St. Louis, (1830,) sold out his interest in the fur company, and was finally killed by Indians on the Cimarron river, in 1831, on his way to Santa Fé, at the head of an emigrant company. It is said that, in his peregrinations in the Sierras, Smith discovered gold somewhere between Mono lake and Salt lake, and that he carried a considerable quantity of it to his partners in the fur company on Green river; but this lacks positive confirmation.

A company of trappers, under the leadership of James O. Pattie, left the valley of the Mississippi, in 1825, bound for the Pacific coast. This company spent five years in roaming through New Mexico and Colorado. They were finally plundered in the Gila valley by the Yuma Indians, and near the mouth of the Colorado. The members of this company first entered California in 1830. An account of this expedition was published in the message of President Jackson to Congress, in 1836.

At this period, and for many years previous, Congress manifested a deep interest in encouraging emigration to the Pacific. As early as 1820, John B. Floyd, a member of Congress from Virginia, framed a bill and presented it to that body, "favoring emigration to the country west of the Rocky mountains, not only from the United States but from China."



DALE CREEK BRIDGE, NEAR SHERMAN, ROCKY MOUNTAINS, WYOMING TERRITORY.

Captain Brown, by water, and Captain Smith, by land, are beyond all doubt entitled to the honor of being the first Americans that ever entered California. Previous to Smith's arrival overland, considerable business had sprung up along the coast of California, and the trading vessels of the shrewd Yankee could be found threading their way into every nook and corner, from Lower California to Sitka. From these vessels, as well as from stray trappers from Oregon, some settlement had been made in the country.

In 1814, one of the Hudson Bay Company's ships put into Monterey for supplies, having on board John Gilroy, a Scottish youth, eighteen years of age, who was so ill with scurvy that he had to be left at this port. Six long years passed from the date of his being left at Monterey before another ship entered that harbor, except the unwelcome visit made by a Spanish pirate, in 1819, which, after capturing the fort, sacked the town and finally burned it, which was not difficult, as it contained only six small houses. Gilroy located in the Santa Clara valley, and was the first Anglo-Saxon, or Celtic, settler in California. He died a few years since, at his home in the town of Gilroy, Santa Clara county, having resided constantly in California from his first arrival.

In 1818, Antonio M. Suñol, a native of Spain, but at one time in the French navy, arrived at Monterey. He resided in California from his arrival to 1865, when he died, in Santa Clara county.

Captain F. W. Macondray, on board the ship *Panther*, from Chili, arrived at Monterey, in 1821; and continued to reside in the country, in mercantile business in San Francisco, until his decease a few years since.

The first mercantile house opened in California was in 1822, by an English firm from Lima, Peru; they established themselves at Monterey. A trade in hides, furs, tallow, wine, and grain was now fast growing to importance. In this year, W. E. P. Hartnell, an Englishman, arrived at Monterey, and W. A. Richardson, also an Englishman, arrived at San Francisco. Hartnell subsequently became the first translator for the United States government of the Mexican archives, and Richardson became the first harbor master at San Francisco.

J. B. R. Cooper arrived at Monterey from Boston, Mass., in 1823, and engaged in catching sea otter on the coast. He died in California in the winter of 1871–2. He was the half-brother of the late Thomas O. Larkin, first and only United States consul in California.

The Congress of the United States, on the 18th of May, 1836, passed an act authorizing an expedition to explore the Pacific ocean, and make a full examination of the islands, rocks, shoals, &c., in the line of the whaling fleets of the Pacific, the coast line, and interior of Oregon and California; and, by order of the President of the United States, and by letter from J. K. Paulding, Secretary of the Navy, dated August 11, 1838, Lieutenant Charles Wilkes, subsequently Commodore Wilkes, was appointed to command the expedition. The Secretary's letter to Wilkes says:

> "Thence you will direct your course to the northwest coast of America, making such surveys and examinations, first of the territory of the United States on the seaboard and of the Columbia river, and afterwards along the coast of California, with special reference to the Bay of San Francisco, as you can accomplish by the month of October following your arrival."

The fleet consisted of the United States ship *Vincennes*, United States ship *Peacock*, United States ship *Relief*, United States brig *Porpoise*, tender *Sea-Gull*, and tender *Flying Fish*. This fleet, well equipped, and manned with seamen and scientific men, sailed on its mission August 18, 1838; and, after exploring the South Pacific, arrived, on April 28, 1841, off Cape Disappointment, near the mouth of the Columbia river· but, owing to the roughness of the bar, and not knowing the channel, Wilkes headed north, and, on the 11th of May, entered the Straits of Fuca, just forty-nine years after the navigator Vancouver, in pursuing the track of De Fuca, had visited there.

Wilkes, in describing his explorations along the north coast, mentions the wreck of a Japanese junk, near Point Grenville, which is midway between the Columbia and Puget sound, Washington Territory. He says:

> "It was also near this spot that the very remarkable occurrence of the wreck of a Japanese junk happened in the year 1833. The officers of the Hudson Bay Company became aware of this disaster in a singular manner. They received a drawing, on a piece of China paper, in which were depicted three shipwrecked persons, with the junk on the rocks, and the Indians engaged in plundering. This was sufficient to induce them to make inquiries; and Captain McNeil (a native of Boston) was despatched to Cape Flattery to obtain further information, and afford relief, should it be needed.
>
> "He had the satisfaction to find three Japanese, whom he rescued from slavery; and the Hudson Bay Company, with characteristic liberality, sent them to England; thence they took passage to China, where, I understand, they still remain, in consequence of their being unable to obtain a passage to Japan."

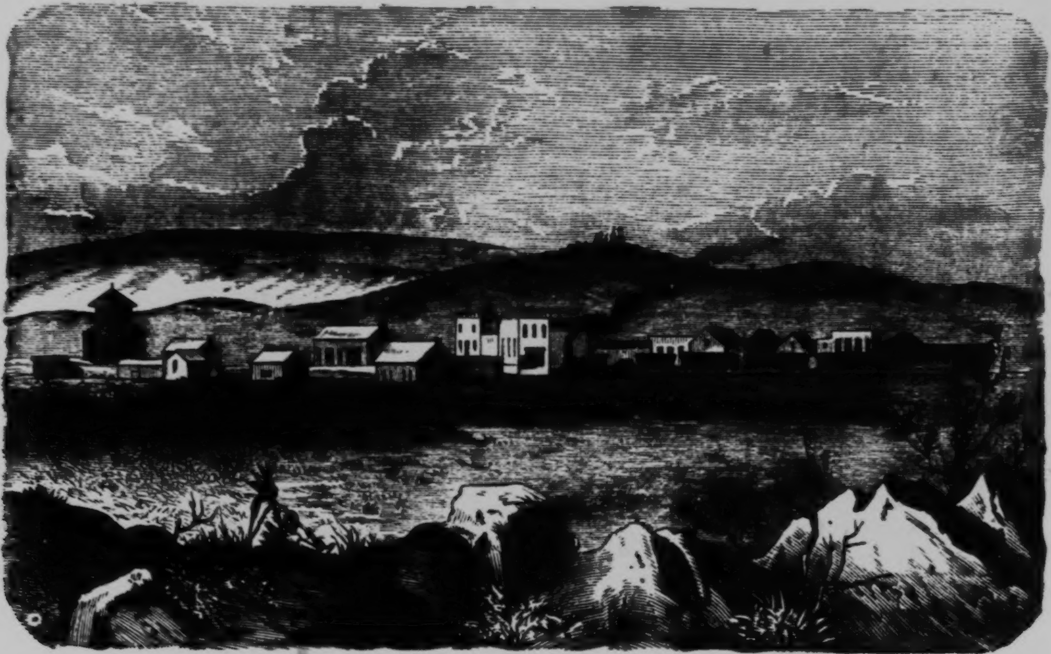
Wilkes, making a voyage up Puget sound, crossed by land to the Cowletz, thence down the Columbia, and arrived at Astoria in the latter part of May, 1841. After extending his explorations inland as far as Fort

Colville, through the greater part of Oregon and Washington Territory, he proceeded to California. On the 14th of October, 1841, the *Vincennes*, Commander Ringgold, arrived at San Francisco. Here intelligence of the death of President Harrison was received. Wilkes, in his report, says: "As soon as the ship anchored, an officer was despatched on shore to call upon the authorities; but none of any description were to be found: the only magistrate or alcalde was absent."

After the land expedition had explored Southern Oregon and a great portion of the interior of California, the various divisions of the expedition met at San Francisco, on the 1st of November, 1841, from whence the fleet sailed for the Hawaiian group. From there the expedition extended its operations to the South Pacific, returning home by China and the Cape of Good Hope, and arrived at New York on the 10th day of June, 1842, and disbanded.

Wilkes' official report to Congress of his extensive explorations in the Pacific—a work of five volumes, with drawings, maps, charts, &c.—is a valuable acquisition to our early history of the Pacific coast; but fails to exhibit either the genial climate or fertile soil of California as these subjects deserve; and the single allusion of his mineralogist, Mr. Dana, of the indication of precious metals in some quartz specimens found in Southern Oregon, is the only mention made of minerals in his report.

It was in conjunction with this expedition, and to explore that part of the Pacific coast which could not be reached by Wilkes' party, that the expeditions of John C. Fremont and his associates were subsequently inaugurated.



SHERMAN, SUMMIT OF THE ROCKY MOUNTAINS, WYOMING TERRITORY.
(Railroad 8,242 feet above the sea. Highest point from ocean to ocean.)

The solicitude of the government to ascertain more concerning the region in the vicinity of the Columbia river being settled up with Americans caused a commission to be issued to John C Fremont, to explore the Rocky mountains in search of an available pass to the Columbia. In furtherance of this object, Fremont, at the head of a party fitted out for this expedition, left Washington, on the 2d of May, 1842; and, after a six months campaign, in which he extended his explorations no farther than the Rocky mountains, he, on the 29th of October, returned and reported the result of his observations, which were so favorably received by Congress that a *second* expedition was fitted out, with directions to explore not only a route through the Rocky mountains but through the greater part of Oregon and California. Fremont was again appointed to command this expedition, consisting of thirty-nine men, which left the Missouri river on their western tour in May, 1843.

Fremont pushed westward with great energy, making scientific observations upon the whole route. On November 4, 1843, he arrived at the Dalles on the Columbia river, Oregon, and soon started southward through the Wallamet valley and Southern Oregon by Klamath lake. Here he encountered the Sierras, and with his horses and mules famishing, surrounded with frowning granite peaks, deep ravines, biting frosts, and increasing depth of snow, without trail or hope of speedy relief, he passed New Year's day, 1844. From this period until March following, this little band battled daily against the rigid frosts and desolation of the Sierras, when, finally, reaching the southern slope of the mountains, hope dawned upon them. They emerged from their winter imprisonment on March 6, 1844.

Fremont, in his report, says:

> "Here the grass was smooth and green, and groves very open; the large oaks throwing a broad shade among sunny spots. Shortly afterwards, we gave a shout at the appearance on a little bluff of a neatly built *adobe* house with glass windows. . . . We came unexpectedly into a large Indian village, where the people looked clean, and wore cotton shirts, and various other articles of dress."

This was one of Sutter's houses, and Fremont and his party soon found themselves in comfortable quarters with the noble Swiss philanthropist.

On the 24th of March, Fremont headed homeward, following the San Joaquin valley, with the Sierras on his left; heading south he soon reached the alkaline plains of San Bernardino county, of which inhospitable region Fremont, in his report, speaks as follows:

> "One might travel the world over without finding a valley more fresh and verdant—more floral and sylvan—more alive with birds and animals—more bounteously watered—than we had left in the San Joaquin; here, within a few miles ride, a vast desert plain spreads before us, from which the boldest traveller turns away in despair."

He further says:

> "Our cavalcade made a strange and grotesque appearance; and it was impossible to avoid reflecting upon our position and composition in this remote solitude. Within two degrees of the Pacific ocean; already far south of the latitude of Monterey, and still forced on south by the desert on one hand and the mountain range on the other; guided by a civilized Indian, attended by two wild ones from the Sierras, a Chinook from the Columbia, and our own mixture of American, French, and German—all armed; four or five languages heard at once; above a hundred horses and mules, half wild; American, Spanish, and Indian dresses and equipments inter-

mingled—such was our composition. . . In this form we journeyed; looking more like we belonged to Asia than to the United States of America."

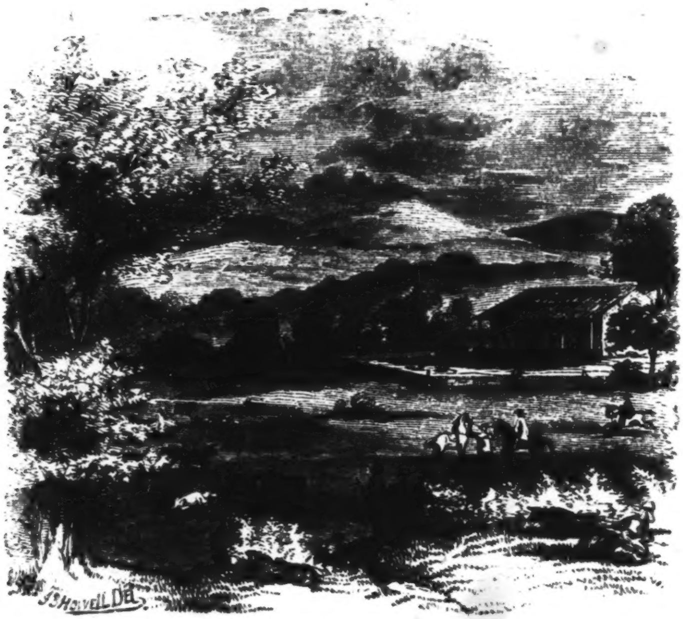
In May, 1844, Fremont and his party found themselves, after travelling a circuit of thirty-five hundred miles since September, 1843, in the vicinity of Salt lake; where they had halted in their westward march. On the 6th of August, 1844, he with his party arrived at St. Louis, where they disbanded, and thus ended his second overland expedition.

# CHAPTER VI.

Pico and Castro in command of California—Decline of the missions—Early trade—English, French, and American consuls in California—Indolence of the people—Fremont's third exploration: his trials and triumphs in California—Castro and Fremont—Fremont raises the American flag—Lieutenant Gillespie carries letters to Fremont—Kit Carson saves Fremont—Sonoma captured—W. B. Ide declares a republican government and hoists the "Bear Flag"—Fremont elected Governor—Commodore Sloat captures Monterey—British projects frustrated—Sloat's proclamation—The American flag hoisted in San Francisco—Commodore Stockton at Monterey—Dupont and General Kearney at Monterey—Arrival of Stevenson's regiment—Uneasiness of the native Californians—Interesting speeches—Proposition to place California under the protection of England or France—General Vallejo favors annexation to the United States.

THE spring of 1846 found Governor Pico and General Castro—who, with General Vallejo, had deposed the last of the Mexican governors in California—in command of the civil and military affairs of the territory. But these officers were neither reconciled to their relations with each other nor the future aspect of the affairs of California. By this time the missions of the pious fathers had been abandoned, and were in a hopeless state of decay; the native converts had lost their piety with the decline of their supply of food; the vast herds and flocks of the Franciscan fathers had disappeared. Most of the officials and influential men of Mexico at one time in the country had either been banished or of their own will had departed. The last of the Spanish galleons had disappeared from the Pacific. The interior trade of the whole country was a mere myth. Ships commanded and owned by Americans were hovering about the ports, supplying the settlers and

MONTEREY, MEXICAN TERRITORIAL CAPITAL OF CALIFORNIA, IN 1846.


J S Howell Del.

MISSION RANCHO, CALIFORNIA, IN 1770.

natives with all kinds of goods and "notions," for which they received hides, tallow, and peltry; these found a market chiefly in Boston. Many foreigners were settling about the coast; and across the plains and from Oregon came considerable numbers of *Yankees*, always a terror to the Spanish and Mexican settlers. England, France, and the United States had their consuls at Monterey, the capital, and the ships of their respective nations seemed to increase and hover suspiciously about the ports.

All attachment to Spanish rule had long since died out, and Mexico, always in the throes of intestine war, had neither security nor attraction for the native population of the country, now the sole rulers of California. The Indians had long before ceased to be the willing slaves of the people. The masses were reckless, indolent, and illiterate, living off the flocks and herds which roamed over limitless acres. Agriculture was almost entirely unknown; the hand of skill and industry had never brought forth from the rich soil the rewards of the husbandman; roads, bridges, canals, and wheeled carriages were unknown; the iron horse had not yet crossed the Mississippi, nor looked out upon the placid waters of the Pacific ocean. All branches of art and manufacture were yet a mystery. Codes of laws, courts, and juries, with doctors, lawyers, and schools, were unheard of. Carpets, cook-stoves, window glass, and wood floors were never seen; milk, butter, cheese, and eggs were something of which the people knew not even by name, although cattle dotted every hill, and the genial climate and prolific soil, without the aid of man, supported all stock the whole year around.

What is now the city of San Francisco was a scattered village of mud and adobe huts, with a few hundred inhabitants, who alternately waded through sand and mud unaided by streets, and no other light than that which the tallow candle or whale oil afforded. Navigation upon the inland waters of the State was confined to a few whaleboats in the possession of the resident foreigners. The great forests, fisheries, quarries of granite, and beds of coal were undisturbed. The sands of the Yuba and Feather rivers still concealed their golden treasure, and the great bosom of nature, which held in its gigantic and stern embrace the mineral wealth of the foot-hills and Sierras, still refused to man the secret which two years later electrified the world, and brought the most unknown and fairest portion of the globe into close social and commercial relations with all parts of the world, and so materially aided in developing California, in 1870, to its status of five hundred and sixty thousand active, educated, and progressive people, in the possession of real estate to the value of two hundred million dollars, and personal property worth one hundred million dollars, and an area and capabilities to sustain a population of seventy million.

The third expedition under Fremont was projected by Congress during the early part of 1845; and in the spring of that year started across the plains and the Rocky mountains to the Pacific, with instructions to endeavor to find the best route from the Rocky mountains to the mouth of the Columbia river. After a most hazardous journey, he arrived with his faithful guide and escort, Kit Carson, and his men, (six of whom were Delaware Indians,) the whole company consisting of sixty-two men, within a hundred miles of Monterey, where he halted, and proceeded in person to the head-quarters of General Castro, the Mexican general in charge of the territory. His object was to obtain a pass for himself and company to go to the San Joaquin valley, where hunting and pasture were abundant. He received a verbal promise from the general that it would be all right, to go where he desired, and that, on his word of honor "as a soldier," he would not be molested. Fremont and his party were soon on their way to the valley.

Three days after this, General Castro had raised an army of three hundred native Californians, and sent a despatch to Fremont, notifying him to quit the country at once, else he would march upon him and put to death his whole company. This treachery did not much surprise Fremont, who replied that he would leave when he was ready. He prepared for action, entrenched himself on "Hank's Peak," about thirty miles from Monterey, and overlooking that village, where he raised the American flag. The whole company was well armed, each with a knife, a tomahawk, two pistols, and a rifle. Castro now came dashing on with cavalry, infantry, and artillery; but, after making a few ineffectual attacks, always galloped off before coming within range of Fremont's bullets. Castro issued bulletins and proclamations daily of the impending destruction of the little band, but always keeping out of rifle-range of the entrenchments. After four days of this *fighting*, Fremont broke camp and started on his journey toward Oregon. Castro was not visible.

Fremont had proceeded into Oregon, and had reached Klamath lake, when he was overtaken by Lieutenant Gillespie, of the United States army, who had left

Washington the previous November, crossing the country from Vera Cruz to Mazatlan, and who arrived at Monterey in a United States sloop-of-war, and started up the valley in search of the explorers. Gillespie had letters to Fremont from the Secretary of State, and it is supposed they, or other letters to him from friends at Washington, caused him to retrace his steps and return to the valley of the Sacramento. This move had been quickened by the fact that, on the very night after receiving his despatches, and while all were asleep, the Indians broke into his camp and assassinated three of his Delaware Indians, and might have slain the whole company had it not been for the vigilance of Kit Carson, who sounded the alarm.

Fremont soon returned to the Sacramento valley, and encamped near the mouth of the Feather river, where the settlers soon flocked around him. Great alarm was caused by reports that General Castro, with a strong force of cavalry, was on the march to attack them. A company of twelve volunteers, headed by Mr. Mersite, started for the Mexican fort at Sonoma, in Sonoma county, and on the 15th of June, 1846, entered and captured the post, where they found two hundred and fifty stand of arms and nine cannon. Here they captured General Vallejo, and took him a prisoner to Sutter's fort at Sacramento.

William B. Ide, a New England man, was left to garrison the fort at Sonoma, with a force of eighteen men. General Castro having charge of the department of Sonoma, issued his proclamation, calling upon his countrymen to rise and drive the marauders from the soil. On the 18th of June, Ide issued *his* proclamation to the people of Sonoma, to defend themselves, and calling upon them to assemble at Sonoma, and assist in establishing a republican government.

Following is Ide's proclamation:

"*A proclamation to all persons and citizens of the District of Sonoma, requesting them to remain at peace, and follow their rightful occupations without fear of molestation.*

"The Commander-in-chief of the troops assembled at the fortress of Sonoma gives his inviolable pledge to all persons in California, not found under arms, that they shall not be disturbed in their persons, their property, or social relations, one with another, by men under his command.

"He also solemnly declares his object to be, first, to defend himself and companions in arms, who were invited to this country by a promise of lands on which to settle themselves and families, who were also promised a republican government; when, having arrived in California, they were denied the privilege of buying or renting lands of their friends; who, instead of being allowed to participate in or being protected by a republican government, were oppressed by a military despotism; who were even threatened by proclamation, by the chief officers of the aforesaid despotism, with extermination, if they should not depart out of the country, leaving all their property, arms, and beasts of burden; and thus deprived of their means of flight or defence, were to be driven through deserts inhabited by hostile Indians to certain destruction.

"To overthrow a government which has seized upon the property of the missions for its individual aggrandizement, which has ruined and shamefully oppressed the laboring people of California by enormous exactions on goods imported into the country, is the determined purpose of the brave men who are associated under my command.

"I also solemnly declare my object, in the second place, to be to invite all peaceable and good citizens of California, who are friendly to the maintenance of good order and equal rights, and I do hereby invite them, to repair to my camp at Sonoma, without delay, to assist us in establishing and perpetuating a republican government, which shall secure to all civil and religious liberty, which shall encourage virtue and literature, which shall leave unshackled by fetters agriculture, commerce, and manufactures.

"I further declare that I rely upon the rectitude of our intentions, the favor of Heaven, and the bravery of those who are bound and associated with me by the principles of self-preservation, by the love of truth, and the hatred of tyranny, for my hopes of success.

"I furthermore declare that I believe that a government, to be prosperous and happy, must originate with the people, who are friendly to its existence; that the citizens are its guardians, the officers its servants, its glory its reward.

"WILLIAM B. IDE.

"HEAD-QUARTERS, SONOMA, *June* 18, 1846."

A flag was improvised, by painting in rude form the figure of a grizzly bear on a piece of white cotton cloth. It followed Ide's proclamation, and was the first flag after California was declared independent of Mexico. It is still in possession of the "Pioneer Society" of California, at San Francisco.

Fremont was at Sutter's fort during these eventful operations; but hearing that Castro intended a raid upon Ide at Sonoma, he reached there, on the 23d of June, at the head of ninety riflemen. He met only a few retreating Mexicans of De la Torres' band, who made their way to Saucelito, where they escaped by boat across the bay to Yerba Buena, (now San Francisco.) Castro did not appear.

Fremont returned to Sonoma, and, on July 4, 1846, called a meeting of the Americans. He was appointed governor, issued a proclamation of independence, and declared war against Mexico; and, at the head of his company of one hundred and sixty men, started for Sutter's fort, intending to attack Castro, who was reported to be at Santa Clara. They soon learned, however, that he was on the retreat to Los Angeles, but they determined to follow him, (some five hundred miles.)

Soon news reached them of a new feature in affairs. On the 7th day of July, Commodore Sloat, of the United

States navy, with the frigate *Savannah* and another small vessel, arrived at the Bay of Monterey, California. The commodore had no instructions from his government to take any hostile steps on the Pacific coast: on the contrary, his mission was peace; but whilst he was at Mazatlan he heard of the annexation of Texas, and of the war waging between Mexico and the United States, and that General Taylor was already marching toward the city of Mexico, and that Matamoras was occupied by United States forces. These things Sloat had learned while on board his vessel at the Mexican port of Mazatlan. The news of these events had been sent by courier privately from the city of Mexico to the Mexican officials at Mazatlan; and although instructions had been issued, dated May 13, 1846, and directed by the President of the United States, to Commodore Sloat, to take possession of and hold Mazatlan, Monterey, and San Francisco, and to declare the country the property of the United States, they had not reached him.

Admiral Seymour, of the British navy, with the line-of-battle ship *Collingwood*, was at Mazatlan. He had also received despatches from the city of Mexico, and it was evident that all the Mexican officials favored the occupation of California by the British, instead of by their enemies, the Americans, with whom they were now at war.

The British admiral, basking in the smiles of the Mexican authorities, hoisted sail upon his ship, and the *Collingwood* majestically moved seaward, bound for Monterey. Commodore Sloat, who was watching with a jealous eye the movements of the British admiral, half an hour later set sail upon his two little vessels, the *Savannah* and *Preble*, and headed directly for Monterey, determined to take possession of the town if he arrived there before the British admiral. The *Savannah*, being the fastest, reached Monterey first, where Sloat learned of determined efforts being made by the British and Mexican authorities to place California under the protection of the English government.

Governor Pico, the Mexican Governor of the Territory of California, and General Castro, were in favor of this scheme. Mr. Forbes, the English vice-consul at Monterey, was active in making the negotiations; and the American consul, Thomas O. Larkin, also at Monterey, informed Sloat upon his arrival of the state of affairs. This, together with the news of the operations of Fremont and his party at Sonoma, (it is supposed he had heard of them,) and the state of affairs between the United States and Mexico, determined him at once (July 7) to despatch two hundred and fifty marines on shore, and to hoist the American flag over the town of Monterey. A salute of twenty-one guns was fired, and a proclamation issued that California henceforth was a part of the United States.

The dull ship of the British rear-admiral arrived at Monterey only to see the stars and stripes floating over it as a part of the republic of America. The admiral, too, read the proclamation, and saw that he was outwitted by Sloat, and outrun by the *Savannah*, and that the swiftness of the *Savannah* and the gallantry of Commodore Sloat had placed California beyond British rule.

The proclamation is as follows:

"TO THE INHABITANTS OF CALIFORNIA:

"The central government of Mexico having commenced hostilities against the United States of America, by invading its territory, and attacking the troops of the United States stationed on the north side of the Rio Grande, and with a force of seven thousand men, under the command of General Arista, which army was totally destroyed, and all their artillery, baggage, &c., captured on the 8th and 9th of May last, by a force of two thousand and three hundred men, under the command of General Taylor, and the city of Matamoras taken and occupied by the forces of the United States, and the two nations being actually at war by this transaction, I shall hoist the standard of the United States at Monterey immediately, and shall carry it throughout California.

"I declare to the inhabitants of California that, although I come in arms with a powerful force, I do not come among them as an enemy to California: on the contrary, I come as their best friend, as henceforth California will be a portion of the United States, and its peaceable inhabitants will enjoy the same rights and principles they now enjoy, together with the privilege of choosing their own magistrates and other officers for the administration of justice among themselves, and the same protection will be extended to them as to any other State in the Union. They will also enjoy a permanent government, under which life, property, and the constitutional right and lawful security to worship the Creator in the way the most congenial to each other's sense of duty will be secured, which, unfortunately, the central government of Mexico cannot afford them, destroyed as her resources are by internal factions and corrupt officers, who create constant revolutions to promote their own interests and oppress the people. Under the flag of the United States, California will be free from all such trouble and expenses; consequently the country will rapidly advance and improve both in agriculture and commerce, as, of course, the revenue laws will be the same in California as in all parts of the United States, affording them all manufactures and produce of the United States free of any duty, and all foreign goods at one-quarter of the duty they now pay. A great increase in the value of real estate and the products of California may also be anticipated.

"With the great interest and kind feeling I know the government and people of the United States possess towards the citizens of California, the country cannot but improve more rapidly than any other on the continent of America.

"Such of the inhabitants of California, whether native or foreigners, as may not be disposed to accept the high privileges of citizenship, and to live peaceably under the government of the United States, will be allowed time to dispose of their property and to remove out of the country, if they choose, without any restriction; or remain in it, observing strict neutrality.

"With full confidence in the honor and integrity of the inhabitants of the country, I invite the judges, alcaldes, and other civil officers to execute their functions as heretofore, that the public tranquillity may not be disturbed; at least until the government of the territory can be more definitely arranged.

"All persons holding titles to real estate, or in quiet possession of land under color of right, shall have those titles guaranteed to them.

"All churches and the property they contain in possession of the clergy of California shall continue in the same rights and possessions they now enjoy.

"All provisions and supplies of every kind furnished by the inhabitants for the use of the United States ships and soldiers will be paid for at fair rates; and no private property will be taken for public use without just compensation at the moment.

"John D. Sloat,
"*Commander-in-chief of U. S. Naval Force on Pacific Ocean.*

"*United States Flag-Ship Savannah,*
"Harbor of Monterey, *July* 7, 1846."

The day following, July 8, by order of Commodore Sloat, a party from the United States sloop-of-war *Portsmouth* landed at Yerba Buena, now San Francisco, and hoisted the American flag on the plaza.

On the 10th, Commander Montgomery, of the *Portsmouth*, sent an American flag to Sonoma, which was hoisted, and the flag improvised by Ide and his men, known as the "Bear Flag," was hauled down, all welcoming the stars and stripes.

Commodore Stockton, on board the United States frigate *Congress*, arrived at Monterey July 15, just one week after Sloat had taken possession of the country; and one week later, Commodore Sloat sailed home on board the *Levant*.

Stockton was now in full command of the American fleet, aided by Commodore Dupont. Meantime, General Stephen W. Kearney had arrived at Monterey, crossing by way of New Mexico. He had orders from the United States government to take possession of and establish a government for California; but, on his arrival, he found that Sloat, Stockton, and Fremont had already accomplished these things.

One of the forces which conduced much to the successful military occupation of California was the arrival at San Francisco, on the 7th of March, 1847, of Colonel Jonathan D. Stevenson, at the head of one thousand volunteers, raised in New York, to serve, during the war, in California. The conquest of California had taken place before the arrival of this regiment; but it was of invaluable service to the State in maintaining order in the country.

Early in 1846, it was agreed upon by the leading Mexican officials of the Territory of California, as promulgated by the Departmental Assembly, that a convention should meet at Santa Barbara, on the 15th of June, 1846, to consider the future prospects of the country. Before this period arrived, the stars and stripes were hoisted by Fremont; but before this, and before the authorities knew of Fremont's coming to the country, an informal meeting, held at Monterey, at the house of Don José Castro, fully developed that the people were ready for any form of government that would afford them protection and security from their never-ceasing political turmoil.

Following are a few extracts from speeches made by leading persons at this meeting:

"Excellent Sirs, to what a deplorable condition is our country reduced! Mexico, professing to be our mother and our protectress, has given us neither arms, nor money, nor the materials of war for our defence. She is not likely to do any thing in our behalf, although she is quite willing to afflict us with her extortionate minions, who come hither, in the guise of soldiers and civil officers, to harass and oppress our people. We possess a glorious country, capable of attaining a physical and moral greatness corresponding with the grandeur and beauty which an Almighty hand has stamped upon the face of our beloved California. But, although nature has been prodigal, it cannot be denied that we are not in a position to avail ourselves of her bounty. Our population is not large, and it is sparsely scattered over valley and mountain, covering an immense area of virgin soil, destitute of roads, and traversed with difficulty; hence it is hardly possible to collect an army of any considerable force. Our people are poor, as well as few, and cannot well govern themselves and maintain a decent show of sovereign power. Although we live in the midst of plenty, we lay up nothing; but, tilling the earth in an imperfect manner, all our time is required to procure subsistence for ourselves and families. Thus circumstanced, we find ourselves threatened by hordes of Yankee immigrants, who have already begun to flock into our country, and whose progress we cannot arrest. Already have the wagons of that perfidious people scaled the almost inaccessible summit of the Sierra Nevada, crossed the entire continent, and penetrated the fruitful valley of the Sacramento. What that astonishing people will next undertake I cannot say, but, in whatever enterprise they embark, they will be sure to prove successful. Already are these adventurous land-voyagers spreading themselves far and wide over a country which seems suited to their taste. They are cultivating farms, establishing vineyards, erecting mills, sawing up lumber, building workshops, and doing a thousand other things which seem natural to them, but which Californians neglect or despise. What, then, are we to do? Shall we remain supine, while these daring strangers are overrunning our fertile plains, and gradually outnumbering and displacing us? Shall these incursions go on unchecked, until we shall become strangers in our own land? We cannot successfully oppose them by our own unaided power, and the swelling tide of immigration renders the odds against us more powerful every day. We cannot stand alone against them, nor can we creditably maintain our independence even against Mexico; but there is something which we can do, which will elevate our country, strengthen her at all points, and yet enable us to preserve our identity and remain masters of our own soil. Perhaps what I am about to suggest may seem to some faint-hearted and dishonorable. But to me it does not appear so. It is the last hope of a feeble people, struggling against a tyrannical government which claims their submission at home, and threatened by bands of avaricious strangers from without, voluntarily to connect themselves with a power able and willing to defend and preserve them. It is the right and duty of the weak to demand support from the strong, provided the demand be made upon terms just to both parties. I see no dishonor in this last refuge of the oppressed and powerless, and I boldly avow that such is the step I would now have California take. There are two great powers in Europe which seem destined to divide between them the unappropriated countries of the world. They have large fleets and armies not unpractised in the art of war. Is it not better to connect ourselves with one of these powerful nations than to struggle on without hope as we are doing now? Is it not better that one of them should be invited to send a fleet and an army to protect California rather than we should fall an easy prey to the lawless adventurers who are overrunning our beautiful country? I pronounce for annexation to France or England."

To this speech General Mariano G. Vallejo—a native Californian—replied as follows:

"I cannot, gentlemen, coincide in opinion with the military and civil functionaries who have advocated the cession of our country to France or England. It is most true that to rely any longer upon Mexico to govern and defend us would be idle and absurd. To this extent I fully agree with my distinguished colleagues. It is true that we possess a noble country, every way calculated, from position and resources, to become great and powerful. For that very reason I would not have her a mere dependence upon a foreign monarchy, naturally alien, or at least indifferent to our interests and our welfare. . . . Even could we tolerate the idea of dependence, ought we to go to distant Europe for a master? What possible sympathy could exist between us and a nation separated from us by two vast oceans? But waiving this insuperable objection, how could we endure to come under the dominion of a monarch? . . We are republicans. Badly governed and badly situated as we are, still we are all, in sentiment, republicans. So far as we are governed at all, we at least profess to be self-governed. Who, then, that possesses true patriotism, will consent to subject himself and children to the caprices of a foreign king and his official minions? . . . Our position is so remote, either by land or sea, that we are in no danger from a Mexican invasion. Why, then, should we hesitate still to assert our independence? We have, indeed, taken the first step by electing our own governor; but another remains to be taken. I will mention it plainly and distinctly: it is annexation to the United States. In contemplating this consummation of our destiny, I feel nothing but pleasure, and I ask you to share it. Discard old prejudices, disregard old customs, and prepare for the glorious change which awaits our country. Why should we shrink from incorporating ourselves with the happiest and freest nation in the world, destined soon to be the most wealthy and powerful? Why should we go abroad for protection, when this great nation is our adjoining neighbor? When we join our fortune to hers, we shall not become subjects, but fellow-citizens, possessing all the rights of the people of the United States, and choosing our own federal and local rulers. We shall have a stable government and just laws. California will grow strong and flourish, and her people will be prosperous, happy, and free. Look not, therefore, with jealousy upon the hardy pioneers, who scale our mountains and cultivate our unoccupied plains; but rather welcome them as brothers, who come to share with us a common destiny."

From this period General Vallejo and his friends took active measures for the annexation of California to the United States. The general still resides in California, his native State, of which he is a loyal and honored citizen.

THE OLD MISSION CHURCH AND OUT BUILDINGS, SAN FRANCISCO.
(Founded in 1776.)

GENERAL VIEW OF THE QUICKSILVER WORKS AT NEW ALMADEN.
(Santa Clara County, California.)

# CHAPTER VII.

Feud between Sloat and Fremont—Commodore Stockton in command: his proclamation—Departure of Sloat—Castro, Pico, and Flores oppose the Americans—Stockton warns Castro of his peril—Flores' proclamation to his countrymen—Final surrender of the Mexicans—Treaty of peace concluded—Strife between Commodore Stockton and General Kearney—Fremont appointed Military Governor—Stockton takes his departure—Fremont ousted—General Kearney and Commodore Shubrick in command—Colonel Mason supersedes General Kearney—General Kearney proceeds to Washington—His ill-treatment of Fremont—Fremont arrested and carried to Fortress Monroe—Court-martialled—Discharged from arrest by order of the President—Nominated for the Presidency.

THE occupation of California by Commodore Sloat and the promulgation of his proclamation was official notice to the world that the territory of California was the property of the United States. This at once ended all effort or design of England or France to possess themselves of the country, and their fleets on the coast quietly withdrew.

Notwithstanding that Fremont had confronted Castro, and had defended the Americans in the Sacramento valley, and had been appointed governor at Sonoma, and proclaimed California a part of the American Union before Sloat had entered and taken possession of Monterey, he found himself superseded by the commodore, who, now in the military occupation of the country, commanded Fremont to report to him, and demanded in no mild terms by what authority he was acting. Fremont, chagrined and disappointed, answered, "Upon my own authority." This was thought most presumptuous on the part of the young captain of the corps of topographical engineers, who had no military authority from his government. But Fremont had to succumb to the superior position of the commodore, who now assumed the duties of military governor.

Fremont was now at Monterey at the head of his battalion, chafing with the mortification inflicted upon him by Sloat. The commodore, under his proclamation of July 7, was in supreme command, but ill-health prompted him to return home.

On the 15th of July, 1847, Commodore Stockton, on board the United States frigate *Congress*, arrived at Monterey. Sloat turned over his command to Stockton, who immediately assumed command as Military Governor of California; and, on the 28th of July, he issued the following proclamation:

> "On assuming the command of the forces of the United States on the coast of California, both by sea and land, I find myself in possession of the ports of Monterey and San Francisco, with daily reports from the interior of scenes of rapine, blood, and murder. Three inoffensive American residents of the country have within a few days been murdered in a most brutal manner; and there are no Californian officers who will arrest and bring the murderers to justice, although it is well known who they are and where they are. I must, therefore, and will, as soon as I can, adopt such measures as may seem best calculated to bring these criminals to justice, and to bestow peace and good order on the country.
>
> "In the first place, however, I am constrained by every principle of national honor, as well as a due regard for the safety and best interests of the people of California, to put an end, at once and by force, to the lawless depredations committed by General Castro's men upon the persons and property of peaceful and unoffending inhabitants.
>
> "I cannot, therefore, confine my operations to the quiet and undisturbed possession of the defenceless ports of Monterey and San Francisco, whilst the people elsewhere are suffering from lawless violence; but will immediately march against these boasting

and abusive chiefs, (who have not only violated every principle of national hospitality and good faith towards Captain Fremont and his surveying party, but who, unless driven out, will, with the aid of the hostile Indians, keep this beautiful country in a constant state of revolution and bloodshed,) as well as against all others who may be found in arms aiding and abetting General Castro.

"The present general of the forces of California is an usurper; has been guilty of great offences; has impoverished and drained the country of almost its last dollar; and has deserted his post now when most needed. He has deluded and deceived the inhabitants of California, and they wish his expulsion from the country. He came into power by rebellion and force, and by force he must be expelled. Mexico appears to have been compelled, from time to time, to abandon California to the mercies of any wicked man who could muster one hundred men in arms. The distances from the capital are so great that she cannot, even in times of great distress, send tim[illegible] aid to the inhabitants; and the lawless depredations upon th[illegible] persons and property go invariably unpunished. She cannot or will not punish or control the chieftains who, one after the other, have defied her power and kept California in a constant state of revolt and misery.

"The inhabitants are tired and disgusted with this constant succession of military usurpers, and this insecurity of life and property. They invoke my protection. Therefore upon them I will not make war. I require, however, all officers, civil and military, and all other persons, to remain quiet at their respective homes and stations, and to obey the orders they may receive from me or by my authority; and if they do no injury or violence to my authority, none will be done to them."

Commodore Sloat, on the 23d of July, sailed home on the *Levant*, leaving Stockton in full command, who immediately organized a battalion of mounted riflemen; and Fremont, who could not even receive a recognition from Sloat, was appointed major, and, at the head of his corps of one hundred and sixty men, embarked on board the United States sloop-of-war *Cyane* for San Diego, to quell a strong opposition organized against the American occupation of the country, headed by

General Castro, Governor Pico, and Don José Marid Flores, whose forces, until January 16, 1847, demanded all the energy and vigilance of Stockton, General Kearney, Fremont, and Gillespie, to hold them in subjection. The final overthrow of this opposition, extending over a vast territory, deprived of every means of transportation, with only about three hundred men against twelve hundred or fifteen hundred well-mounted and most expert cavalry of the enemy, reflects in its details the highest credit upon the bravery, skill, and fidelity of John C. Fremont, Commodore Stockton, and their officers and men.

The bulletins and proclamations issued by the contending parties were often of an exciting and belligerent tone; a few samples of which are here given.

Commodore Stockton, on leaving Monterey to chastise Castro, said, in one of his proclamations: "Immediately march against the boasting and abusive chiefs, who had not only violated every principle of national hospitality and good faith toward Captain Fremont, but who, unless driven out, would keep this beautiful country in a constant state of revolution and bloodshed, as well as against all others who might be found in arms aiding and abetting General Castro." And again: "Tell Castro he must unconditionally surrender, or experience my vengeance."

The following proclamation, issued by Flores, will show how tenaciously some at least of the native Californians opposed American occupation of California:

"*Mexican Army, Section of Operations,*
"ANGELES, *October* 1, 1846.

"FELLOW-CITIZENS: It is a month and a half that, by lamentable fatality, fruit of the cowardice and inability of the first authorities of the department, we behold ourselves subjugated and oppressed by an insignificant force of adventurers of the United States of America, and placing us in a worse condition than that of slaves.

"They are dictating to us despotic and arbitrary laws, and loading us with contributions and onerous burdens, which have for an object the ruin of our industry and agriculture, and to force us to abandon our property, to be possessed and divided among themselves.

"And shall we be capable to allow ourselves to be subjugated, and to accept, by our silence, the weighty chains of slavery? Shall we permit to be lost the soil inherited from our fathers, which cost them so much blood and so many sacrifices? Shall we make our families victims of the most barbarous slavery? Shall we wait to see our wives violated—our innocent children punished by the American whips—our property sacked—our temples profaned—and, lastly, to drag through an existence full of insult and shame? No! a thousand times no! Countrymen, first death!

"Who of you does not feel his heart beat with violence, who does not feel his blood boil, to contemplate our situation? And who will be the Mexican who will not feel indignant, and who will not rise to take up arms to destroy our oppressors? We believe there is not one so vile and cowardly. With such a motive the majority of the inhabitants of the districts, justly indignant against our tyrants, raise the cry of war, with arms in their hands, and of one accord swear to sustain the following articles:

"1. We, the inhabitants of the Department of California, as members of the great Mexican nation, declare that it is and has been our wish to belong to her alone, free and independent.

"2. Consequently the authorities intended and named by the invading forces of the United States are held null and void.

"3. All the North Americans being enemies of Mexico, we swear not to lay down our arms till they are expelled from the Mexican territory.

"4. All Mexican citizens, from the age of fifteen to sixty, who do not take up arms to forward the present plan, are declared traitors, and under pain of death.

"5. Every Mexican or foreigner who may directly or indirectly aid the enemies of Mexico will be punished in the same manner.

"6. The property of the North Americans in the department, who may directly or indirectly have taken part with or aided the enemies, shall be confiscated, and used for the expenses of the war, and their persons shall be taken to the interior of the republic.

"7. All those who may oppose the present plan will be punished with arms.

"8. All the inhabitants of Santa Barbara and the district of the north will be invited immediately to adhere to the present plan.

"JOSE MA. FLORES.

"CAMP IN ANGELES, *September* 24, 1846."

On the 16th day of January, 1847, the war waged by the Californians under Castro, Pico, and Flores was brought to a close by the flight of Flores to Mexico, and the capitulation of Castro, Pico, and their forces to Fremont. Commissioners were appointed on both sides to arrange terms of peace. The Californians acknowledged the supreme authority of the Americans, and the Americans promised protection of life and property to all Californians and Mexicans of every class and condition, regardless of former acts of hostility. All prisoners on both sides were released, paroles cancelled, and all parties to stand upon an equal footing whilst submissive to the authority of the United States. This treaty, concluded by Fremont while his two superiors, Commodore Stockton and General Kearney, were in the face of the enemy but a few miles distant, was a bold and presumptuous act, at once defiant and destructive of the official dignity of his superiors. But a victory so easily won, and so effectually ending a strife carried on under most unfavorable circumstances by the Americans, and at once placing the flag of the republic in triumph over so vast a field, was not to be despised; and the good sense of Stockton and Kearney led them to accede to the situation, leaving to Fremont the laurels so boldly won. The American conquest was complete, and the war in California at an end.

Fremont, on the 16th day of January, 1847, signing himself "Military Commandant of California," approved the treaty, which was signed on the part of the Americans by Major P. B. Reading, Colonel W. H. Russell, and Captain Louis McLean; and on the part of the Californians by José Antonio Carrillo, Augustine Olivera, and Andres Pico, "Commandant of Squadron and Chief of the National Forces of California."

Now came a serious conflict of rank and jurisdiction between General Kearney and Commodore Stockton; Kearney claiming that his instructions from Washington, to take charge of California and establish a government, placed him in authority as military governor, and the superior of both Fremont and Stockton. Stockton had taken possession of the country, and was acting as military governor before Kearney arrived in the country, and claimed to rank Kearney. Fremont decided to report to Stockton, which he did on his entering Los Angeles, on January 14, 1847. On the 16th, two days later, Stockton appointed Fremont Military Governor, and W. H. Russell Secretary, of the new Territory. Stockton in a few days departed from the port of San Pedro for the coast of Mexico.

Fremont now found himself comfortably enjoying the dignity of governor, and the title of the conqueror of California. But there was trouble ahead little dreamed of. General Kearney was chafing at the indignity offered him by Fremont reporting to Stockton, and at Stockton placing Fremont as Military Governor of the Territory, and was determined to be revenged.

Kearney departed for Monterey. Here he found Commodore Shubrick, on board the United States ship of war *Independence*. Kearney and Shubrick were now in possession of official authority from their government, appointing the former Military Governor of California, and the latter supervisor of customs, port charges, and naval affairs. On the 1st day of March, 1847, these two officials made a joint proclamation, setting forth their official positions, and forwarded a copy of the document to Governor Fremont, whose brief gubernatorial star of less than two months was eclipsed forever. Kearney, from this date, entered upon the duties of his new office as Military Governor of California.

Fremont, aware of the official authority by which Kearney was acting, obeyed the orders of his new superior; but the officers and men of Fremont's battalion, and indeed the whole native population, felt so indignant at what they conceived to be an outrage perpetrated on Fremont, that there was much danger of another outbreak.

Important events were now transpiring with great rapidity. Colonel Mason had arrived from Washington with instructions to relieve General Kearney, assume military command, and relieve Fremont from all connection with the army, allowing him either to pursue his explorations northward or to join his regiment and obey the commands of the new military governor. Here ended the two months military reign of General Kearney, who, on the 19th of June, 1847, started on his journey overland to Washington, compelling the ill-treated Fremont to turn over to another his surveying instruments, sold all the horses he had collected, refused him permission to join his (Kearney's) regiment, and obliged him to follow in the wake of his (Kearney's) trail across the plains, and to encamp at night never more than one mile from Kearney. This was a most humiliating position, but Fremont was obeying the orders of his superior officer. Kearney was determined to crush him, and at Fort Leavenworth Fremont was arrested, carried to Fortress Monroe, where a court-martial found him guilty of disobedience mutinous and disorderly conduct, and sentenced him to forfeit his commission. President Polk, however, approving the findings and decisions, discharged Fremont from arrest, and requested him to report for duty; but Fremont, regarding the whole situation as an outrage and an insult, resigned his commission, and returned to private life: not to be forgotten, however, for the majority of the people of the country considered him the pioneer conqueror of California, and a much-abused man, and, in respect of his eminent service, and the sympathy consequent upon a real or supposed persecution, he was placed at the head of the ticket for President of the United States by the Republicans in 1857, when he received 1,341,514 of the popular vote to 1,832,232 by Buchanan, the successful Democratic candidate.

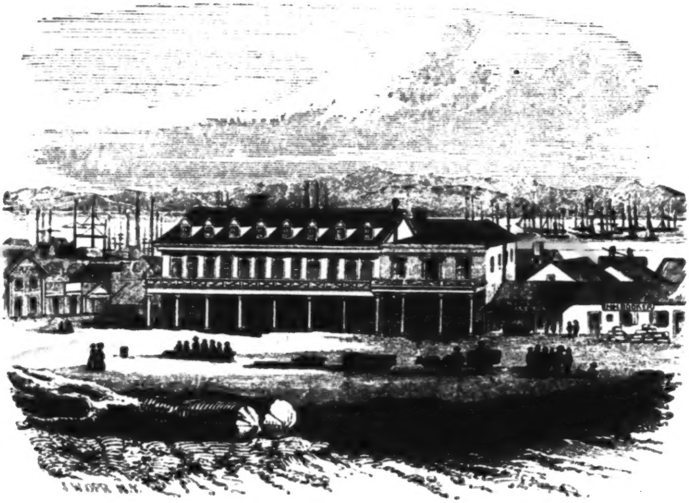
## CHAPTER VIII.

Colonel Mason and General Riley in command of the government of California—End of the Mexican war—Acquisition of Texas and New Mexico—Treaty between the United States and Mexico—Boundary established—Convention to frame a State Constitution meets at Monterey—California admitted into the Union—Treaty between England and the United States defining western boundary—Claims of Portugal to California—Claims of Spain—Pope Alexander VI settles the dispute—Treaty between Spain and Portugal—A bull from the Pope—Chain of title to California—Speech of Hon. Thomas H. Benton on the boundary question—Treaty stipulations—Rulers under Spanish, Mexican, and United States governments in California—English, French, and American Consuls in California.

Colonel Richard B. Mason, who succeeded General Kearney as Military Governor of California, assumed command on the 31st of May, 1847, and continued in office until the 13th day of April, 1849; when he was succeeded by General Bennet Riley, who entered upon the office of military governor, under whose administration affairs were conducted until California was admitted as a State into the Union, on the 9th of September, 1850.

The war between the United States and Mexico, which began by the battle of Palo Alto, on the 8th of May, 1846, and ended with the fall of the city of Mexico, on the 14th of September, 1847, and which secured to the United States Texas and New Mexico, afforded little opportunity for the government to quell disturbances or establish a government in the then inaccessible land of California.

At the close of the Mexican war, a treaty was entered into between the United States and Mexico, defining



DENNISON'S EXCHANGE AND THE PARKER HOUSE, SAN FRANCISCO.
(Before the Fire of December 1849. Parker House rented for $120,000 a year in 1849.

ISLAND AND COVE OF YERBU BUENA, IN 1847.
(City of San Francisco built on the Cove.)

the southern boundary of the United States, and ceding a vast portion of the northern territory of Mexico. By the terms of this treaty, the line dividing the republic of Mexico and the United States was declared to be the Rio Grande, to the thirty-second parallel; thence westward along the southern line of New Mexico to the Gila river; thence following that stream until it joined the Rio Colorado; thence westward to the Pacific ocean south of San Diego about one league, and in latitude thirty-two and a-half; the United States paying fifteen million dollars to Mexico, and adopting the claims of citizens of the United States against that country. This treaty, ceding New Mexico and California, and defining the southern boundary of the United States, was dated at the city of Guadalupe Hidalgo, February 2, 1848; exchanged at Queretaro, May 30, 1848; ratified by the United States, March 16, 1848; and officially proclaimed by the President, July 4, 1848; and thus the title of the United States to New Mexico and California was complete.

Meantime, General Riley, as military governor, continued to rule California. On June 3, he issued a proclamation calling a State Convention to frame a constitution. The convention assembled at Monterey, on Monday, September 1, 1849. The constitution was adopted October 10, 1849, and ratified November 13, 1849. On the 20th of December, 1849, General Riley proclaimed the election of the new governor under the constitution, and resigned his position as military governor; and, by act of the United States Congress, California, without going through the probationary stages of a civil territorial government, was, on the 9th day of September, 1850, admitted into the Union.

During the early part of the conquest of California, the western boundary of the whole American possessions was undefined, and a source of danger between England and the United States; but happily, on the 15th of June, 1846, a treaty was concluded between the two nations, confirming the western boundary of the American republic, and also confirming the title of the United States to the Territory of Oregon, the boundary line being "the forty-ninth degree of latitude from the Stony mountains west to the middle of the channel which separates Vancouver island from the continent; thence southerly through the middle of the channel and to Fuca straits to the Pacific ocean."

The more fully to define and illustrate to the reader the origin of the legal Spanish and American titles to California, and to understand the chain of titles, let it be remembered that the Portuguese, previous to the discovery of America by Columbus in 1492, had discovered the Azore islands, in longitude thirty-one west; in consequence of which, all the discoveries made by Columbus were claimed to belong to the crown of Portugal, and that Spain had no title to them and that her subjects should be excluded from these possessions. This proposition was rejected by Spain. The dispute upon the right of possession between Spain and Portugal to these countries was referred to Pope Alexander VI—the law of nations and the adopted law of the world then recognizing the pope as the ultimate source of all temporal power. He was king of kings, making and unmaking them and their possessions at will, without recourse upon the part of the dethroned. The origin and source of all landed titles was conceded to be in his infallible holiness.

On the 3d day of May, A. D. 1493, the pope rendered his decision between the crowns of Spain and Portugal. By his decree, all countries inhabited by infidels, already discovered by or which might be discovered by the Spanish, west of one hundred leagues west of the Azores, he granted to Spain; and all lying east of that line to Portugal. In 1494, a treaty between the Kings of Spain and Portugal moved this boundary two hundred and seventy leagues further west. The boundaries thus established continued to be respected by all nations; and, when an infringement of it was attempted through the avarice of King Henry VII of England, who attempted to possess himself of a portion of the territory granted to Spain, a bull from his holiness the pope caused him to abandon his designs. Thus it will be seen that the chain of title to California was, first, by the discoveries of Spain and Portugal; then by the decree and division by Pope Alexander granting it to Spain; from Spain to Mexico by revolution; from Mexico by conquest and treaty to the United States.

In conjunction and illustration of the foregoing history of American title and claim to the northern boundary of the republic, the following extracts from a speech delivered in the United States Senate, on the 12th day of January, 1843, by the Hon. Thomas H. Benton, may serve a good purpose.

Mr. Benton, speaking upon the northern boundary question, said:

"—The treaties of 1803 and 1819; the former with France, by which we acquired Louisiana; the latter with Spain, by which we acquired all her rights on the northwest coast of America north of forty-two degrees. By the first of these treaties we became a party to the tenth article of the treaty of Utrecht between France and

England, the treaty of peace of 1714, which terminated the wars of Queen Anne and Louis XIV, and settled all their differences of every kind in Europe and America, and undertook to prevent the recurrence of future differences between them. The tenth article of this treaty applied to their settlements and territories in North America, and directed commissioners to be appointed to mark and define their possessions. These commissioners did their work. They drew a line from ocean to ocean, to separate the French and British dominions, and to prevent further encroachments and collisions. This line began on the coast of Labrador, and followed a course slightly southwest to the centre of North America, leaving the British settlements of Hudson bay to the north, and the French Canadian possessions to the south. This line took for a landmark the Lake of the Woods, which was then believed to be due east from the head of the Mississippi; and from that point took the *forty-ninth parallel of latitude indefinitely to the west.* The language is '*indefinitely;*' and this established the northern boundary of Louisiana, and erected a wall beyond which future French settlements could not cross to the north nor British to the south.

"As purchasers of Louisiana, the treaty of 1803 *made us a party to the tenth article of the treaty of Utrecht*, and made the *forty-ninth parallel the same to us and the British which it had been to the French and the British:* it became a wall which neither party could pass, so far as it depended upon that line."

California, from her permanent occupation by Spain and the establishment of her rule in 1767, to 1822—a term of fifty-five years—had ten Governors. Under twenty-four years of Mexican rule—from 1822 to 1846—she had thirteen governors; and under the American military rule of four years—from July 7, 1846, to September 9, 1850—had six military governors.

But three nations had appointed consuls in California previous to the American occupation of the country. In 1843, Thomas O. Larkin, an American, who arrived in California in 1836, was appointed United States consul which office he held until July 7, 1846, when

Commodore Sloat took possession of the country in the name of the United States. In 1844, James A. Forbes was appointed the first consul from Great Britain, which office he still held at the time of the American occupation. In May, 1845, Don Louis Gasquet was appointed French consul, which office he held until 1847, when he was succeeded by M. Movenhaut. All these officers resided at the Mexican capital of the Territory, Monterey.

## CHAPTER IX.

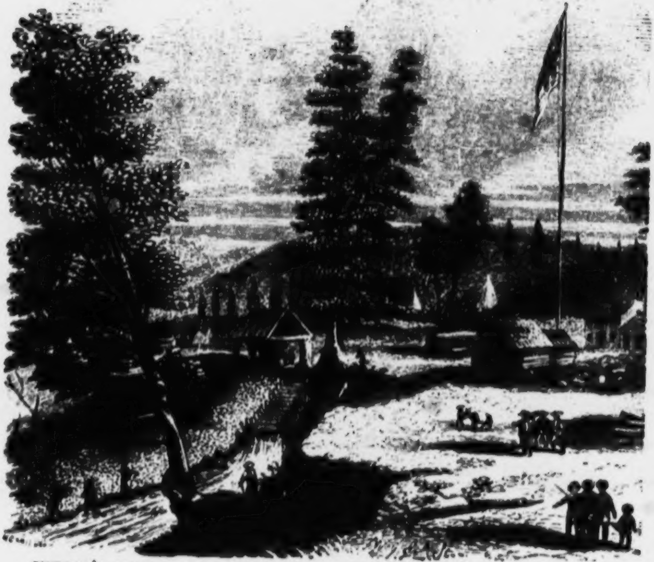
California under American rule—Population in 1842 and 1845—Arrival of Mormons at San Francisco—Population in 1848—In 1870—Composition of population of San Francisco in 1842—Establishment of Mission Dolores—First house built in San Francisco—First child born—Hudson Bay Company at San Francisco—First newspaper in California—First school—First Protestant minister—First Protestant church—First steamboat—Discovery of gold—Sutter and Marshall—First mining—Rush to the mines—Official notice of the gold discovery—Early gold-seekers—Advent of the Chinese.

No sooner was California in the possession of the Americans, and the flag of the republic waving its protecting folds over the land, than new life was infused into every branch of commerce, trade, and industry; and the Spanish, Mexicans, and Indians began to seek seclusion or oblivion before the march of the invader, who laughed at the tame realities of life, so soon to give place to scenes of commercial enterprise, industry, speculation, and wild excitement hitherto unknown in the annals of history.

The total white population of California, in 1845, is estimated to have been about eight thousand. During the years 1846 and 1847, considerable emigration had found its way from Oregon, over the Rocky mountains, and by sea.

On the 31st of July, 1846, the ship *Brooklyn*, from New York, with about two hundred and thirty Mormons, under the leadership of Samuel Brannan, arrived at San Francisco, with the intention of founding a Mormon settlement.

At the beginning of 1848. it was estimated that the



SUTTER'S MILL, WHERE MARSHALL DISCOVERED THE FIRST GOLD IN CALIFORNIA, JANUARY 19, 1848.

FRONT STREET, SACRAMENTO CITY, 1850.

whole white population of California, of all nations, was about fourteen thousand. At this period (1870) it is about six hundred thousand. The population of San Francisco, in 1842, was only one hundred and ninety-six persons—seventy-six men, forty-two women, forty-two boys, and thirty-six girls. The census taken in this year gives the name, age, birthplace, sex, and occupation of each person, in which there were in all but twenty-six foreigners, as follows: ten Americans, four Englishmen, four Sandwich Islanders, two Germans, two Irishmen, and of Manilla, Peru, France, and Scotland, one each. No lawyers, insurance agents, dentists, tailors, hatters, dressmakers, real estate agents, doctors, or undertakers appear in the list. The marked improvement and growth of San Francisco continued steadily from the date of the American conquest. Although the Mission Dolores (now in the city limits of San Francisco) was established in 1776, there was not a solitary sign of life or settlement about the bay or beach of Yerba Buena cove, now the heart of the city of San Francisco, until 1835, when a tent made of old sails was erected by Captain W. A. Richardson. On the 4th of July of the following year, Jacob P. Leese erected a small frame building adjoining Richardson's house, in which was born, April 15, 1838, Rosalie Leese, the first child born at Yerba Buena, (good herb,) now San Francisco, and the city was started. At this point, a small depot of the Hudson Bay Company was established, which, however, disappeared in 1846. In January, 1847, San Francisco had a population of four hundred and fifty-nine persons of all classes—three hundred and twenty-nine males and one hundred and thirty-eight females; of these three hundred and seventy-five were whites, thirty-four Indians, forty Sandwich Islanders, and ten negroes—eighty-four colored. The whites represented the following nations: United States, two hundred and twenty-eight; California, thirty-eight; Mexico, two; Canada, five; Chili, two; England, twenty-two; Germany, twenty-seven; France, three; Ireland, fourteen; Scotland, fourteen; Switzerland, six; at sea, four; and of New Holland, New Zealand, Malta, Denmark, Peru, Russia, Poland, Sweden, and West Indies, one each. At this period the trades and professions were beginning to be represented: a minister, a schoolmaster, two surveyors, three lawyers, and three doctors represented the professions; many of the trades were represented.

A weekly newspaper, published by Samuel Brannan and edited by E. P. Jones, called the *California Star*, was the first newspaper published in San Francisco; but as early as August 15, 1846, Messrs. Colton and Semple had started the *Californian*—the first paper published in California—at Monterey. In May, 1847, this journal was transferred to San Francisco.

San Francisco was fast assuming a city appearance. In March, 1848, it contained two hundred houses, and a population of eight hundred and fifty souls. A public school—the first in California—had been opened on the 3d of April, 1848, by Thomas Douglas. On November 15, 1848, the first steamer ever upon the waters of San Francisco bay—a small boat taken from Sitka by Captain Leidesdorff—made a trial trip around the bay. In October, 1848, the first Protestant church in California was established by Rev. T. Dwight Hunt at San Francisco. Mr. Hunt was a Presbyterian minister, who came from the Sandwich islands, and was the first Protestant minister in California. There was no regular church organization: Mr. Hunt preached in the schoolhouse.

Although the first gold had been discovered by James W. Marshall, at Sutter's mill, on the American river, as early as the 19th of January, 1848, no news of the fact had reached San Francisco until February following, when the crash came which sent its echo throughout the world, and drew within the circle of California people of every part of the globe. The great event which brought the almost unknown and distant land of California to the notice of the world, and produced in so brief a period such scenes of excitement and commercial advantages, was the discovery of gold.

In the fall of 1847, Captain John A. Sutter, a Swiss by birth, and a man of great adventure and many sterling qualities, who arrived in San Francisco July 2, 1839, and located in the following year at *New Helvetia*, near Sacramento, was erecting a saw-mill at a place called Coloma, about fifty miles east of Sacramento City, on the American river, which empties into the Sacramento. James W. Marshall had contracted for the erecting of the mill, and he and his men were at work in cutting and widening the tail-race: to effect this, he let the water of the river through the cut, which in its course carried away quantities of earth and sand. In cleaning portions of this away, Marshall observed some particles of yellow glittering substance: these he examined through curiosity. This was on the 19th day of January, 1848. A piece of gold, weighing about six pennyweights, was carried by Marshall, in about two weeks, to Captain Sutter, who examined it without much belief of its value. Much doubt of its being gold still rested among all who saw the "stuff;" and Sutter seems to have regarded Marshall as insane when he insisted that it was gold.

In February following, specimens of the new discovery were carried to San Francisco. Here an old Georgian gold-miner—Isaac Humphrey—saw it, and at sight pronounced it gold, and at once prepared to start for the new gold-fields. His persuasions failed to induce any of his friends to accompany him: they laughed at the idea, so he was compelled to start alone; and, on the 7th of March, 1848, reached the place of discovery. The news had now spread among the workmen and others in the vicinity of the discovery of "some curious yellow stuff." Humphrey, on March 8, commenced prospecting, and soon confirmed his belief of the nature of the discovery. Soon the workmen abandoned the sawing of the lumber and erecting of the mill, and plunged into the new labor, now paying from five to fifty dollars per day to the hand. Through the spring and summer of 1848, the news of the discovery reached San Francisco and every hamlet in California and Oregon, and the excitement became intense; and from every direction the pilgrims wended their way to the new Mecca—the gold-fields. The scattering population of the valleys caught up the excitement: wild stories of fabulous discoveries had reached them: fields of standing grain were left to fall to the ground; cattle, farms, wives, and children, all abandoned. The news continued to spread. Quantities of the precious metal were in the hands of miners, reporting that *all* could make from ten to one hundred dollars a day; in some

JAMES W. MARSHALL, DISCOVERER OF GOLD IN CALIFORNIA, JANUARY 19, 1848

"HONEST MINERS" GOING HOME, IN 1850.

SURFACE GOLD MINING IN CALIFORNIA IN 1849.

INTERIOR OF THE "EL DORADO," GAMBLING HOUSE.
(On Kearney Street facing the Plaza, in 1849.

cases, many thousands. This was too much. Who could endure it? A dollar and a dollar and a-half per day were the wages of laborers and mechanics at San Francisco. It was only one hundred and twenty miles up the river to Sacramento, and from there a few miles to the mines. All hands—the schoolmaster, butcher, baker, lawyer, doctor, and merchant—started up the Sacramento river. The whole village was on the march: only the few women and children remained. The two newspaper offices closed: even the *devil* was amongst them, as some of them fully realized before they got through. Oregon's sturdy settlers made their long pilgrimage from the north, over snow-capped mountains and lonely deserts. Up from the lower portion of the State came the native Californian mounted on his faithful steed, the half-breed, and the Indian. Now from Mexico came the miner, vaquero, and desperado. Up from Chili and Peru came the speculator, gambler, and courtesan. Over the Rocky mountains came the long lines of the emigrant trains, working their tedious march over almost precipitous mountains of eternal snows and arid deserts of alkali and quicksands, leaving behind them the new-made grave, and the bleaching bones of their famished and overburdened brutes, to tell the sad story of their weary journey, and to mark the path of the future traveller over the sandy deserts of the Humboldt.

The few vessels that could find sailors to take them from the coast spread the news wherever they touched. The inhabitants of the lonely and unfrequented islands of the seas heard the glad tidings of the land of gold.

Official announcement was made of the rich discoveries in the halls of Congress; and, as the news spread through the American republic, the people seemed spell-bound and charmed—maddened to embrace the element of social power. The peculiar mental and physical temperament of the American, his activity, and excitability, well fitted him to become the subject of what now assumed the form of a painful disease. No class was exempt from the ravages of the new mania; so, from Maine to the Mississippi, occupations were abandoned; the judge, lawyer, doctor, merchant, banker, mechanic, farmer, mariner, and laborer bade adieu to startled friends, hurriedly kissed weeping wife and child, bade them farewell, and across the plains, over the Isthmus, around the Horn, joined the hurrying throng, bound for California.

From England, Germany, France, Russia, and Spain, came the gold-seeker. Australia and Van Dieman's Land let loose their penal colonists. The islands of the sea sent forth their strange-looking inhabitants of various hues, complexions, and tongues. The Turk and the Greek joined in the throng. From across the deep sea came a strange people, the seal of whose national exclusiveness had never been broken until touched by the magic shock of gold in the sands and hills of the new world. They were a peculiar people. The similarity of physical organization, the long, coarse, black hair braided in a solitary cue behind, with shaven crown, almond eye, yellow face, and mechanical, measured step, told of a race whose primeval order had never been disturbed by any other branch of the human family. Their strange and inharmonious voice and unknown tongue seemed to startle the most stoical of all the races of men, whilst their singular costume gave them more the appearance of beings of another sphere than the inhabitants of earth. In silent, sullen mood with all mankind, and without knowing the sound of a voice of any of the many nationalities with whom they were to associate, or being able to convey either by word or gesture a single thought, want, or idea to any save their own race, they, with their kettles, rice, heathen gods, and chop-sticks, joined in the ever-lengthening procession of strange-looking beings, and set their face towards the reputed land of gold.

## CHAPTER X.

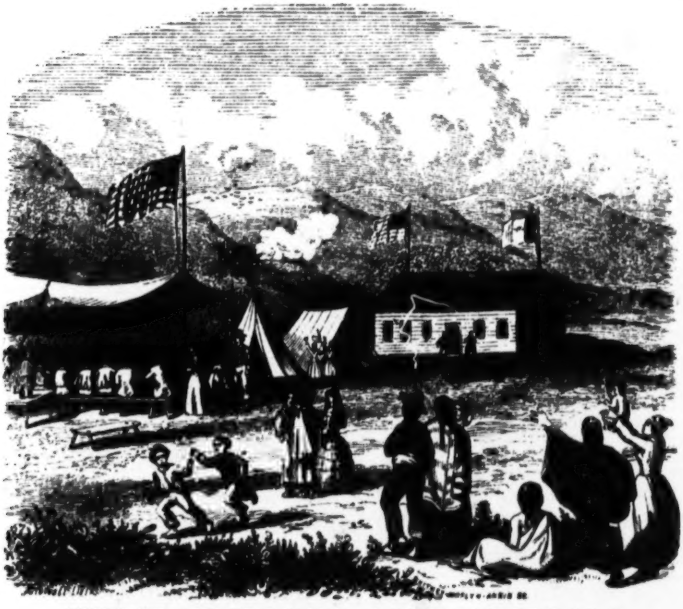
Population of California in 1849—Rush to the mines—Gold yield of 1848—Population and scenes of San Francisco in 1849—Ships for California—Overland emigration—Across the Isthmus—Arrival of first steamer—Commerce in 1849—Occupations of the people—Gray-shirt brigade—Ships at a discount—Up the Sacramento river—Early disappointments—Gambling—Gold product—Gold excitements—Honesty of the "forty-niners"—Lynch law—Prices in the mines—Cultivation of the soil—Cattle—Eggs—Fruit—All "going home in the spring"—Indians in the mines—Yankee speculators—Suffering and disappointments in the mines—Miners going home.

THE year 1849 is a period ever memorable in the history of California; and there are few portions of the civilized globe which cannot find among its inhabitants those who can date from that year the departure of dear friends bound for California whose faces they have never again beheld.

The excitement of the gold discovery in 1848 had, up to January 1, 1849, more than doubled the population of California. At this period the total population was estimated at twenty-six thousand—thirteen thousand natives, eight thousand Americans, and five thousand of all other nations. During the year 1848, ten million dollars in gold had been extracted from the mines, principally from the Yuba, Feather, and American rivers, and the gulches thereabout; the rocker, shovel, prospecting-pan, and crevice-knife, being the only machinery employed.

In San Francisco and throughout the country the excitement was intense; but, up to the spring of 1849, it was confined to the small population on the coast, most of whom had been in California for many years.

SAN FRANCISCO IN 1849.



CELEBRATING THE FIRST FOURTH OF JULY, AT THE FIRST HOUSE IN SAN FRANCISCO, 1836.

But, in the spring of 1849, there was a new stimulus. The city of San Francisco, in January, 1849, had a population of two thousand, most of whom were preparing to go to the mines when the rainy season would be over. How little did they dream of the flood of human beings to be let loose upon them! Already the ocean was dotted with sails from every nation of the globe, all heading for distant California. The gallant ship, with impatient crew and passengers, was buffeting the gales of Cape Horn, or seeking a passage through Magellan's straits. The trade winds of the North Pacific were bearing before them hordes of strange beings from Asia and the islands of the seas. The eager Yankee, with bowie-knife and revolver attached, was threading the serpentine course of the miasmatic Chagres, or belaboring his stubborn mule through the jungles of the Isthmus; or, by the tedious journey of the plains, following the dusty line of the meandering ox-team, as he anxiously cast his wistful eyes toward the promised land in the direction of the setting sun.

On the 28th of February, 1849, the pioneer steamship of the ocean line of American passenger ships—*The California*—arrived at San Francisco from New York. She was followed by the steamship *Oregon* from New York, which, with three hundred and fifty passengers, arrived on the 31st of March following. The steamship *Panama*, with a load of passengers, arrived August 4.

The floodgates of commerce and population were now open, and through them poured a torrent of human beings upon the little village of San Francisco, with its few adobe and frame houses, nestling around the beach and sand-hills. Ships were daily arriving with full cargoes of merchandise: no wharves, warehouses, stores, streets, offices, lumber, or labor were to be had at *any price*. July, 1849, found the Bay of San Francisco filling with the ships of every nation, and the Golden Gate received a continuous stream of shipping. The flags of every nation, with the peculiar marine architecture, customs, costumes, and language of the newcomers, lent a romantic aspect to a scene fearfully wild and disordered, in consequence of the haste and anxiety of *all* to start for the mines; for now the most fabulous stories, with the fact of the arrival of millions of dollars in gold-dust, wrought the public mind into a feverish delirium. Five hundred square-rigged vessels lay in the harbor, with half a mile of mud-flats between them and high-water mark—Montgomery street; but one wharf, Broadway, to accommodate this fleet. Agents and consignees of these valuable ships and cargoes found the crews (sometimes including officers) take to the small boats as soon as the anchor was dropped, and head for the Sacramento river toward the new diggings. Lighters, scows, and boats had to land these cargoes, but what could be done? Of the few conveyances of this character, none could be had but at fabulous prices. Laborers, who, a year ago, would have been glad to have received one dollar and a-half a day, now demanded from twenty to thirty dollars. There were no laborers: one man was as good as another—they were "in a free country:" who would labor for hire, when he could go to the mines and *become a millionnaire?* Still they came: more ships, more people; no room, no lodgings, no lumber, nobody to saw lumber; no forests supposed to be in the country, nobody thinking about *forests*. Carpenters, blacksmiths, teamsters, clerks, sailors, or soldiers, as soon as they touched *land*—all became *miners*. Ho! for the mines!

The scramble now became powerfully intense: everybody on the run unless stuck in the mud or deep sand. Off came the coats of the merchants, speculators, doctors, and preachers, carrying, lugging, wheeling boxes, goods, and boards, erecting tents of canvas and old sails, tin, raw-hides, blankets, and even of body clothing. The stove-pipe hat, black clothes, and white shirt gave way to the slouch-hat and gray shirt. Razors were out of use: no time to shave. Goods selling at any prices: sometimes at rates making a fortune for the owner, again at prices which brought him to the verge of ruin.

The sand-hills and mud-flats now presented the appearance of a battle-field: people of every nation, costume, tongue, and clime, in the busy and excited crowd, hauling, running, trading, buying, selling, building, drinking, fretting, cursing, laughing, dancing, weeping, and doing a little of every thing under the sun but praying; all seemed to flounder about in supreme recklessness. The tailor, shoemaker, and clerk awkwardly pulled at the heavy oar to move the lumbering, freighted scow deserted by the sailors, now on their way to the mines; the judge sweating and chafing, as with judicial invectives he levied his *quo warranto* upon a refractory mule belly-deep in mire, in the legitimate exercise of his hereditary prerogative of backing out of a bad job; the doctor refusing to see the results of his emetics, and pills cheap at five dollars each. Shovels, boots, blankets, prospecting-pans, butcher-knives, bacon, gray shirts, whiskey, and tobacco were in great demand. Gold sixteen dollars per ounce, weighed on the coffee-scales, or "hefted" in the hand.

The first six months of 1849 added more than fifteen thousand to the population of the country, over ten thousand of whom landed in San Francisco: less than two hundred of all this number were women. More ships, more people, more excitement. Splendid ships were left to the mercy of the winds, deserted by all hands. A ship's boat was worth more than a ship, for in the former the crew could make a voyage up the Sacramento river, and thence on foot to the mines. These frail craft, filled with gold-seekers and deeply laden frequently with provisions and tools besides, were headed across the dangerous inland sea of the Bay of San Francisco, and up the Sacramento river, each person armed with some implement of propulsion: the oarsman with oars, passengers with shovels, tin-pans, paddles, pieces of boards, and even the hands and feet served their purpose in endeavoring to propel the crazy little concern, often making but little progress, or brought to a standstill by the excited crew and passengers pulling in opposite directions—one rowing up stream, another on the other side, or his next companion, laboring in his excitement to drive her down stream. The scenes on the river were often very amusing and ludicrous.

Even as early as 1849, it was not all gold that glittered; and many a poor fellow, disheartened, ragged, and forlorn, sought the back track, at least as far as San Francisco, where he could earn regular wages at some honest employment, or enter upon the exciting scenes of the gambling-house, now publicly indulged in by all classes.

The up-river parties, on meeting a boat coming down stream, would of course suppose that her crew were returning with a load of gold, and would hurriedly inquire the "news from the mines," receiving an answer that all was right up there—that all they had to do was to go up and fill their bags, generally directing them to some place perhaps never heard of before, or noted for its poverty. In evidence of their own success, they would call the attention of the new-comers to several canvas sacks in the bottom of their boat: these generally were filled with a heavy black sand intended for the eyes of the up-river crews, and only served as ballast, being worthless. On beholding these bags, the eyes of the up-river crews were frequently seen to start in their sockets; unintelligible sounds were heard to proceed from their throats as they plunged their oars, shovels, pans, dippers, and legs into the water, while heading toward Sacramento. These bags thus afforded some compensation to the disappointed returning crews.

Mining was not confined to the Yuba, American, and Feather rivers, but spread over the entire field of the ravines, gulches, and streams of the foot-hills, and up to the Sierras; many of the locations yielding immense fortunes of pure gold with but little effort or mechanical appliances. More than forty million dollars were obtained in the year 1849; and, from January 19, 1848, the day of the discovery of gold in California, to the beginning of 1870, the gold product of the State has been one billion dollars. (For table and product, see Appendix.)

The overland emigration was constantly pouring into the valleys and ravines of the upper country, and here scenes of the wildest excitement prevailed; sometimes caused by the discovery of rich "pockets" in the river beds, or nuggets in the gulches, but oftener by the fabulous reports of waggish or half-crazy "prospecters," who, without the least foundation in fact, reported the discovery of "mountains of gold," or lakes whose sands were sparkling yellow; the location of these "discoveries" generally being sufficiently distant from those receiving the secret to lend a charm to the tale, and to wear out their patience and exhaust both their body and purse before they returned to their starting point; conscious of their fulfilment of that passage of Scripture which says that "the last condition of that man is worse than the first."

Throughout the gulches and ravines, cotton-tent villages sprang up as if in a single night; soon to present scenes of excitement, activity, and industry. Honesty was a virtue with the "forty-niners:" merchandise, tools, provisions, clothing, and gold-dust were secure in and about the tent-doors both day and night; and not until the floods of adventurers by sea and land poured in did petty thieving commence. There was no time for courts, juries, and lawyers to be occupied in discovering and punishing offenders: so on discovering a thief he was summoned before a few miners, and, if found guilty, was, without delay, placed upon a mule's back, a rope put about his neck, tied to the limb of some sturdy oak, and ordered to stand up; the mule received a lash of a whip, and the culprit was left suspended: thus ended the career of many an early gold-seeker.

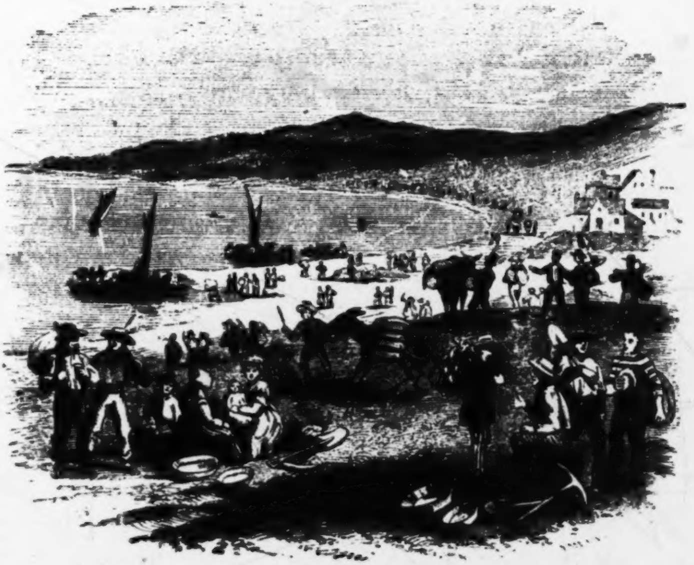
Prices in the gold-fields ran beyond all conception. Luxuries were out of the question: if any were offered, they were bought up at once by those who first saw them, without questions. Vegetables and fruits were scarce: no person had time to attend to the cultivation of the soil: a few apples from Oregon, or from the few orchards about the missions, were considered cheap at from one to five dollars apiece. So with produce: eggs were rare indeed, and considered cheap from one to five dollars apiece, regardless of age or quality. Of fresh butter there was not a pound: there were plenty of cattle in the valleys—wild Spanish stock, fast as race-horses and fierce as tigers: who would undertake the subjugation of such animals, milk them, and go through the tedious process of butter-making? Hatching chickens with the hope of eggs at some future date, and planting trees that apples might grow, would have been considered proof positive insanity, had such things been done. All were sojourners, "going home in the spring" or fall, as the case might be, with a fortune (?) Men with little tents and booths fitted up for the sale of goods suitable for the miners were coining money.

Thousands of Indians, sometimes under the leadership of whites, or on their own account, worked, often making large amounts, but generally spending at night their day's earnings: whiskey was the first consideration with the aborigine, after which he might indulge in the luxury of a gray shirt, which would constitute his whole costume. The squaws, besides packing all the food and doing all the drudgery for their lords, would gather a little gold, which they would invest in a slouch-hat and gray shirt, and their toilets and wardrobes were complete. These simple children of the forest had not yet learned the value of gold, nor the use or meaning of the scales; so they gave whatever they had, were it much or little, for any article which they might fancy. One Yankee, in this way, realized fifty thousand dollars in a few days from two rolls of three-ply carpeting: this he cut up in pieces of two yards each, cut in the centre lengthwise, large enough to admit of the head; this was bound with braid, and a bunch of ribbon of some fancy color ornamented each end of the cut; this formed a gaudy garb for both male and female natives, and thus caparisoned, and leaping with joy, they entered upon their new career of fashion.

The mines continued steadily to yield their golden wealth. Twenty-five dollars a day might be the average of the miners, still thousands were making hundreds per day; and thousands, after paying exorbitant prices for every thing, and being "in bad luck," found themselves, after a year's hard labor and deprivation, without a dollar: clothes, health, hopes, all gone; far from home, dispirited, disappointed, in receipt of letters from wife or fond ones at home making urgent appeals for help, or anxiously imploring their return, reminding them of their promises when leaving home that they would only be absent six months or a year.

The latter part of 1849 and the years 1850 and 1851 found thousands of penniless, downcast miners, returning by the steamers to their Eastern homes, or plunging into gambling, dissipation, and vice. Meantime the gold product was still on the increase—forty million dollars being extracted in 1849, fifty million dollars in 1850, and fifty-five million dollars in 1851. Many persons, having realized large fortunes, either returned home or entered into business in the growing towns in California.

FIRST PROTESTANT CHURCH IN SAN FRANCISCO—1849.
(First Presbyterian Church.)



RUSH TO THE GOLD MINES FROM SAN FRANCISCO IN 1848.

## CHAPTER XI.

Growing importance of San Francisco—Crime and dissipation—First Vigilance Committee—Law and order—Building a city—Destroyed by fire—Rebuilt—Wild speculation—Strange occupations—Fortune and misfortune—First house built at Sacramento—Population of—Prosperity in business and speculation—Price of land in San Francisco—Rents in San Francisco—Prices of merchandise—Amusements—Board—Labor—Cost of building—Streets paved with merchandise—Gold-hunters still arriving—Largest product of gold—Suicide and death—Only a mining country—Import of breadstuffs—Interior steam navigation—First river steamer—Fares on the rivers.

THE rush to the mines from San Francisco, during the years 1849, 1850, and 1851, was unabated still. Streams of immigrants and gold-seekers entered the Golden Gate, though large numbers were returning home. San Francisco continued to be the grand emporium of commerce. Its harbor was the only port of entry and egress on the entire coast. Here the newcomer learned his first California experience, and here the disappointed miner, the gambler, cutthroat, and courtesan plied their arts. The "Sydney Ducks" and "Hounds"—classes of desperadoes—were ever on the alert for booty. They were a great auxiliary to the reckless land-grabber, who, regardless of law or equity, possessed himself of all property from which he could drive the occupant. These fellows were good as standing witnesses in any case, provided they "could see the color"—that is, were well paid; good on juries either to acquit their friends or convict their enemies; loud of mouth, bold in swagger; could drink more whiskey, chew more tobacco, smoke more cigars, and use more slang phrases and profane language than anybody else; late at the bar-rooms and gambling-houses at night, and late in bed in the morning; early and often at the polls on election day; armed always with pistol, bowie-knife, and sword-cane. If some land-robber wanted a few men, all he had to do was to go to the head-quarters of these gangs, and state that he wanted help: fifty or a hundred dollars apiece would bring a gang, who, with ropes, would drag down the shanty of some unoffending man, who, with fifty pistols at his head, had to surrender his property. These bands often became so bold and defiant that their robberies were celebrated with processions, banners, and bands of music. These villains were, in the summer of 1849, disbanded by the interposition of the citizens, who formed a vigilance committee, tried, convicted, and sentenced a number of them.

Later in the same year and in 1850, courts were established, and soon wholesome legislation and police regulations began to exert their influence upon a population which, at best, owing to natural causes, was wild, rash, riotous, and disorderly.

The years 1850 and 1851 exhibited great activity and progress in San Francisco; and although the greater part of the city had been burned for the fourth time, still, Phœnix-like, it rose from the ashes. Wild speculation in city lots, merchandise, and lumber had now to a great extent taken the place of the first excitement about the mines. Mud-flats were being filled in, sand-hills levelled, houses built, banks, hotels, restaurants, and stores erected; employment of all kinds in demand, and thousands ready to do any thing, after their first experience of salt bacon and beans in the gulches and mountain ravines, which refused them fortunes. Every distinction in costume, country, trade, and profession was levelled: the gouty judge and nimble tailor were catering to the hungry crowd in the restaurant; the blacksmith sawing lumber; a dentist shoeing a kicking mustang or slaughtering a bullock; a butcher keeping a millinery store; a barber cleaning tripe and making sausages; a shoemaker shaving at a dollar a head; a painter digging a gutter; a horse-doctor building a boat; a lawyer sawing firewood; a sailor milking a cow; a bookkeeper blacking boots; a jeweller picking chickens or digging clams; a merchant in the kitchen as cook; a farmer keeping an assortment store; an ox-driver painting a sign; while a sickly-looking clerk shovelled down a sand-hill. All were tradesmen, all were professional men. Trades or occupations would change with the last job or highest pay. Men who could not succeed left the country in disgust, never to return again; while their next neighbors, with a fortune, returned to take their families to the land of gold—"God's best country," as the fortunate ones would call it; and so it was to many, who, landing upon its shores penniless, were soon able to pay off their debts at home, and place themselves and families in affluence. How different with those who, forming the larger class, either returned home with barely enough to pay their passage, or who, failing in health, hopes, and fortune, have found unknown graves, or still chase the fickle phantom which allured them to a strange land.

The State of California kept continually increasing in population and wealth. Cities and villages sprang up in all directions. Sacramento, a barren waste in 1848, and in which the first frame house was erected in

January, 1849, had, in the spring of 1850, a population of twelve thousand. Other places of importance, both in the mining and agricultural regions, were springing up. Great life and bustle abounded everywhere; the gold product was still on the increase; labor was well rewarded. Fortunes were made in San Francisco, Sacramento, and in many of the mountain towns, in a few business operations, or by the constant profits of a small store. Land and rents in San Francisco had run beyond all precedent: fifty and one hundred vara lots in San Francisco were, as late as 1850, granted by the alcaldes, under the Mexican laws, to persons, on payment of sixteen dollars; many of these lots, in one or two years, were worth *hundreds of thousands* of dollars; and many of the best city blocks now in the city cost their present owners but the above price. Fifty thousand dollars for a lot, which, a few days previous, sold at two or three thousand, was not uncommon. A rude shell of a frame store or cotton tent rented for fabulous prices: for instance, a canvas tent near the plaza—the "El Dorado"—fifteen by twenty-five feet, rented for forty thousand dollars per annum; the "Parker House," a common two-story frame building on Kearney street, also near the plaza, brought a yearly rent of one hundred and twenty thousand dollars; a small, rough wood building at the plaza, rented by Wright & Co., brokers, at seventy-five thousand dollars per annum; a small, one-story rough building, twenty feet front, occupied as a store, rented at forty thousand dollars a year; and for poor accommodations for the custom house business a rent of seven thousand dollars per month was paid.

Some leading articles of commerce were very dear: flour and salt pork, forty dollars per barrel; coarse boots, from thirty to one hundred dollars a pair; wages for common labor, one dollar per hour; and mechanics, twelve to twenty dollars a day. Amusements were luxuries: in the circus sixty dollars for a private box, and three dollars in the pit. Board in a hotel, or tent, about eight dollars a day, and from twenty-five to forty dollars per week. Lumber from three hundred to five hundred dollars per thousand. To build a brick house, it was estimated that it would, when finished, and that too in a rough manner, cost a dollar for each brick in the building.

Soon vast overstocks of many descriptions of goods glutted the market; so much so that, rather than pay the exorbitant rents and storage necessary, the mud-holes and gulches were filled up with boxes of choice tobacco, and Clay street, for a great distance, was paved with shovels, the handles making a kind of corduroy, and rather rough surface.

Immigrants and gold-seekers were still coming. In 1850, the State had a population of 117,538; twenty-seven thousand people arrived in San Francisco by sea and by the Isthmus. The year 1852 showed a population of 264,435. During the year 1853, thirty-four thousand gold-seekers had returned home by sea, and fifteen thousand by land. The yield of gold in this year was the largest ever produced in the State—sixty-five million dollars. The product has kept steadily decreasing ever since at about an average of two million dollars per annum, until the present time, (1872,) when it is about twenty-five million dollars.

During the first years of the mines, much distress and disappointment prevailed, owing to diseases engendered by long voyages, hardship, and exposure in the mines, disappointment in business or at the faro-table. Deaths from sheer neglect, want of medical aid, drunkenness, or suicide—the latter always a favorite mode in California of relieving one's self of life's burdens—were frequent.

Throughout the first three or four years of the mining excitement, every article of trade had to be imported. Most people believed that California was only a mining country—that nothing would grow upon the barren soil without constant irrigation; so that the imports, in 1853, of San Francisco were over forty-five million dollars, over five million dollars of which was for flour and meal, four million dollars for butter, and over four million dollars for lumber. In this year, over fifty-seven million dollars in gold was exported. The tonnage arrivals and departures were considerably larger in this year than that of the port of Boston.

As early as 1853, San Francisco was the third city in tonnage entrances in the United States—New York and New Orleans alone being ahead of it. Since that period, however, the tonnage entries have fallen off considerably; still, San Francisco is fourth in this line yet—only three, New York, Boston, and New Orleans, being ahead.

The navigation of the Sacramento and other rivers and the Bay of San Francisco, in the year 1848 and the early part of 1849, was carried on exclusively in small sailing crafts, (which were very scarce,) and in ships' boats, which made tedious voyages. After the gold discovery, and before steamers were in California, these small vessels found active employment in carrying passengers at twenty-five to forty dollars each to Sacramento: ten days, and two weeks, would be occupied by these crafts in making the trip. In October, 1849, communication by steam to Sacramento was established: the first boat being the "*Pioneer*," a small iron steamer shipped out from Boston in pieces; next came the steamer *Mint*, followed by the *McKim*. All these entered upon the passenger trade to Sacramento in October, 1849, performing the trip in half a day. Fares were yet high: cabin, thirty dollars; deck, twenty dollars; a berth, five dollars extra; and meals, two dollars. The steamer *Senator* was soon after put on the Sacramento route; and from that period to the present, steam navigation of all the inland waters of the country has been conducted with great spirit and with splendid steamers.

Let it be remembered that the first steamer ever upon the Bay or waters of San Francisco and California was the small boat, about the size of a ship's boat, taken from Sitka in 1847, by Captain W. A. Leidesdorff, and run on the bay until February, 1848, when she was lost in a northwest gale in the Bay of San Francisco.

## CHAPTER XII.

Early agriculture—No vegetables—Gardening in the mines—Advent of farmers—Ignorance of seasons and crops—Increase of agriculture—Lumber—Fishing—Manufacturing—Coal—Fruits—Vegetables—Permanent settlement in California—Varied industry—Happy homes—Legitimate occupations—Gold-hunters' graves—Overland emigration—Suffering of the "Donner party"—Settlers to the rescue.

THE settlers in California before the discovery of gold, as well as those immediately succeeding that period, had the most vague and incorrect idea of the agricultural capability of the country. Some small vineyards and wheat-fields were cultivated by the Mexicans about the missions. The new-comers soon formed the opinion that California was only a mineral region, a desert of sand-hills, rugged, volcanic mountains, and alkaline flats. Such were the reports written "home" by the gold-seekers, and such the prevailing opinion among the masses of the people everywhere. Of course, in the first years of the gold-fever, no one had the time nor disposition to cultivate the soil; so that every mouthful consumed came by ship to San Francisco. The luxury of fresh fish, butter, eggs, and vegetables was not to be thought of. There was no *time* to grow vegetables: if they could be produced by steam, or dug out of the hills, the people might stop to cook them. After a while, some miner who had a fixed habitation would plant a few seeds and cultivate a little spot, with a few cabbages, onions, lettuce, and potatoes, only to be surprised that, without manure and without care, they would grow most luxuriantly, and sell at fabulous

HORSE-RAISING AT OAK KNOLL, CALIFORNIA.

prices. Soon, every mining camp and gulch was producing a supply of vegetables. Those who could not endure hard labor, or whose "luck" refused them gold, sought the rich spots about the streams and ravines, and practical gardening was soon in full operation, often paying much better than mining. Others seeing the price of chickens and eggs, and being fully disgusted with their fate in the mines, turned their attention to raising fowls; this also often paying large revenue. Others, again, having a few cows, would make butter, and sell milk at prices paying well their time and labor. Farmers were arriving with their families and teams across the country; and, after a few months disappointment in the mines, would seek the valleys and cultivate the soil—first in the small valleys about the mines, and after a while they extended into the lower and fertile regions of the Sacramento, San Joaquin, and Santa Clara valleys.

Imperfect knowledge of the seasons, and an idea that through the dry summers every thing, even wheat, must be irrigated, often led to great loss and delay, and in many instances to total failure of crops. Many of these branches of industry were not only carried on under circumstances of great ignorance as to seasons and soil, but ignorance and inexperience in most of those engaged as to the practical workings of their calling; as, an ex-judge or briefless lawyer setting hens or feeding chickens and selling eggs; a frisky young doctor or merchant's clerk picking lettuce or selling squash; a tailor trying to milk a kicking cow; a sailor roasting his goose; an apothecary trying to plough; while a shoemaker waxed warm in the exercise of all his power to make both ends meet by sowing wheat to the last end of the land.

Agricultural implements were scarce and rude; and, as for houses, the canvas tent was the only structure on the premises. Harness and implements all lay upon the ground in all seasons of the year, and an untidy, shiftless, agricultural population soon sprang up in most sections of the country. The miners and the entire population of the towns and villages were all uniformed with the gray shirt and slouch hat; all looked alike in that respect: all were "honest farmers, going home in the fall," or "honest miners, going home in the spring."

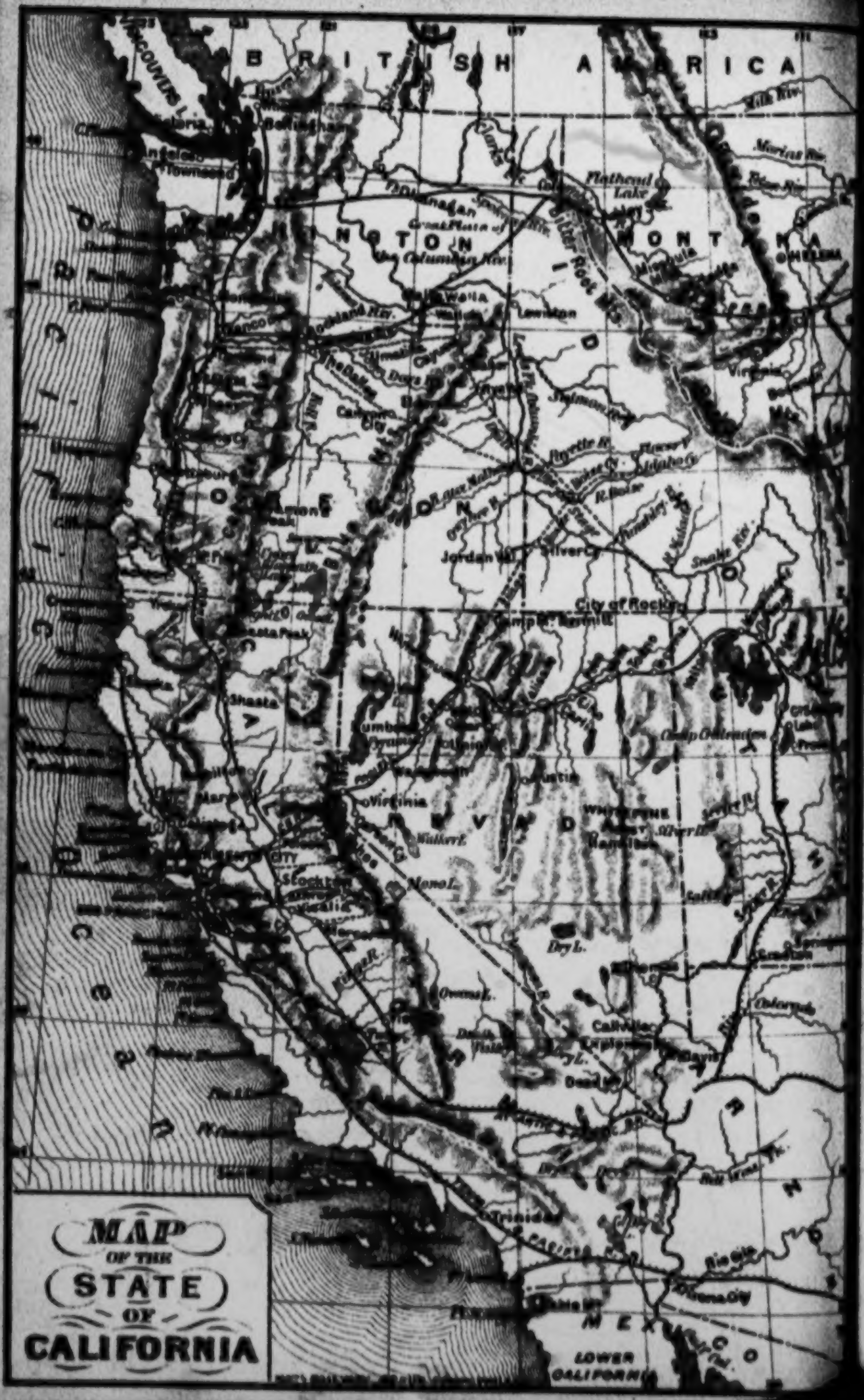
From the year 1853, the agricultural and other industrial pursuits of the State progressed with great energy, and often with most encouraging results: a good season often making a fortune from a patch of potatoes, beans, or onions, or from a field of wheat. Men began to rush to the mountains and cañons in search of lumber, erecting steam and water power mills, and supplying much material for buildings, bridges, wharves, and replacing with sawed lumber the raw-hide fences of 1849 and 1850. Fleets of boats and squads of men were engaged in supplying the markets with fish from the rivers and bay. Granite, slate, and marble quarries were opening; coal from Monte Diablo was in the market; asphaltum from the lower coast made excellent sidewalks and roofing; fruit trees of two and three years growth were yielding luscious fruits; strawberries, cherries, and currants began to be abundant; immense fields of thousands of acres waved in golden-colored wheat; and, from an importer of breadstuffs, California has become the greatest exporter of wheat and flour of any State in the Union.

People were beginning to see that California had other resources than her mines, and to think that they might make their homes in her beautiful, rich valleys where eternal summer reigns. So soon as the people began to be impressed with the idea of a permanent residence for themselves and families, and abandoned the idea of roving over the country in search of a fortune with which to "return home," California entered upon a new era of prosperity. At this period men settled down to their work in earnest; and while many made fortunes, experience had taught the masses that to make a good living, support their families, and lay up a little yearly, was all that could be expected. With these ideas, men sent for their families and began to build up their new homes. Most of those from the cold regions of the Atlantic States, Canada, and Europe, seeing the benefits and pleasures of so genial a climate as California, determined to live and die in the land of gold. Throughout the entire coast new fields of labor were opened, and new and permanent homes erected. The vast valleys were fenced, tilled, and harvested; quiet homes nestled in the small, rich valleys and gulches, secluded in the foot-hills and cañons; substantial dwellings in the cities, with neat cottages in the country, began to show that California, as well as other lands, had *homes.*

Speculation in mining and commerce must now share its laurels with the arts and labor now asserting their dominion, and calling to their support men of ability, ambition, and industry. With the constantly increasing population, and the progreſs in mining, commerce, and agriculture, there sprang up a demand for machinery, raw and manufactured articles of daily consumptior; and soon an army of operators, laborers, mechanics, and artisans plunged into the field. The pursuits to be followed were not always selected with regard to the experience or fitness of the person engaged, but generally with an eye to how much *money* there was in it. This often led to amusing scenes and conflicts of occupations and strange results; as often occasioned by the singular customs, styles, and manner of doing business by the people of the various nationalities represented, or by general ignorance. Pay was good, and in most cases better for a mechanic than for a miner; and soon the gold-hunters were in swarms transformed into agriculturalists, mechanics, and artisans; they settled quietly down as farmers, lumbermen, teamsters, fishermen, carpenters, blacksmiths, tanners, tailors, masons, coachmakers, painters, surveyors, photographers, physicians, judges, lawyers, preachers, teachers, hotel and bar-room keepers, politicians, and grave-diggers; the latter class having, from July, 1850, to July, 1853—three years—buried in San Francisco alone 4,055 gold-hunters. Poor fellows! how many of them, struck down either by disease contracted on the tedious voyage round Cape Horn, on the miasmatic Isthmus of Panama, in the mines, or by dissipation, and far from the kind hand and gentle care of fond ones to aid and cheer them, have left their epitaph written only in the aching hearts of those who still, in doubt and fear, sigh for them, while their unmarked graves occupy their uncertain tenure in the shifting sands of *Yerba Buena!*

In the whole history of California and the trials of its early pioneers there is no chapter so sad in its details as that of the unfortunate immigrant company known as the "Donner Party." Of the immigration of 1846, a party of about eighty took a new route, by the south end of Salt lake. The advance party of the immigrants of that season reached the Sacramento valley before the falling of the snows in the mountains; but the Donner party, consisting of eighty persons—forty-three men, thirty women, and seven children—owing to delays, found themselves, on the 31st of October, at the Truckee pass, in the heart of the Sierras; and, owing to an unusually early and severe winter, in the midst of mountains of snow, through which a passage was utterly impossible. Their cattle had been buried in the snow, and fell among the ravines, so that no trace of them could be found. Soon out of provisions, starvation stared them in the face: all hope gone, and the last morsel of tough ox-hide having been devoured, the aspect grew fearful. A party of fifteen persons—five women, eight men, and two Indians—left Donner's camp about six weeks after their halt, and headed west, in hopes of reaching the settlements west of the Sierras. After toiling through the snows, often twelve feet deep, they found themselves at the end of the first week out of provisions, fainting and falling one by one. Three remaining ones pushed forward, after partaking of the flesh of their fallen comrades, drying the remainder and packing it on their backs for food, upon their horrid journey. Still toiling on, they were soon again out of food; the last raw-hide string from their snow-shoes was eaten. At this stage, the two Indians, fearing that they might be murdered for food, stealthily left. The seventeenth day out, the last of the party, except one, had expired. The unfortunate survivor, more dead than alive, aided by two friendly Indians, reached the settlers on Bear river. Aid was immediately forwarded to the remaining survivors in the snows of the Sierras by the people of the valleys, who, from San Francisco to the foot-hills, were all saddened at the terrible news of the sufferers. The relief parties found it most hazardous to penetrate the Sierras. On reaching the camp of the unfortunates, scenes of horror presented themselves: the wild aspect of the surviving skeletons, as they stared in blank and idiotic gaze with their hollow eyes from their pillows of snow, surrounded by the grim skeletons of their dear friends, was heart-rending. Of the eighty persons doomed to this awful mountain imprisonment, but forty-four survived—twenty-two of whom were females.

Donner's camp, the farthest away of the immigrants, was not reached by the relief party until late in April, 1847. At this camp all were dead but one: he, surrounded by the skeletons of his fallen comrades, and his kettle in which was boiling his meal of human flesh, refused food. He had been converted into a cannibal, repulsive and savage; and only by force was he compelled to quit the horrid scenes of his six months imprisonment.


MAP
OF THE
STATE
OF
CALIFORNIA
BRITISH AMERICA
VANCOUVER I.
Bellingham
Townsend
Milk Riv.
Marias Riv.
Flathead Lake
Missoula
HELENA
Great Plains of the Columbia Riv.
WASHINGTON
MONTANA
Bitter Root Mts.
Walla Walla
Lewiston
IDAHO
Salmon Riv.
Boise
Virginia
OREGON
Jordan Val.
Silver City
Snake Riv.
City of Rocks
Camp McDermit
Shasta Peak
Shasta
Humboldt
Pyramid L.
oVirginia
Austin
NEVADA
WHITE PINE
Hamilton
Camp Colorado
Walker L.
Mono L.
CITY
Stockton
Visalia
Owens L.
Dry L.
Dead Val.
Calville
Tulare
Colorado
Bill Williams Fk.
Trinidad
PACIFIC
Rio Gila
Arizona City
MEXICO
LOWER CALIFORNIA

## CHAPTER XIII.

California—Origin of the name—Griffins in the land—Hot ovens of the natives—Area of the State—Agricultural, mineral, grazing, and marsh lands—Area equal to one hundred and forty-five States the size of Rhode Island—Compared with states and countries of Europe—Equal to thirty-eight governments of Europe—Capable of supporting a population of eighty-three million—Great productiveness of the soil—Genial climate—Great natural resources—Commercial importance—Mountains—Valleys—Rivers—Climate—Seasons—Harvests—Forests—Mineral range—Beauties and wonders of the Sierras.

CALIFORNIA: the origin of the name of this State has been a fruitful subject of disputation by writers both of the past and present centuries, all of whom fail to give any *positive* date or identity of person or circumstances to support the various theories regarding it; and as the most searching investigation on the part of the author of this volume has failed to clearly define the origin of the name, or to throw any new light upon the subject, some of the opinions generally entertained respecting this subject are here given.

The name is first found in a small volume of romance published in Spain, in 1510, entitled "*The Sergas of Esplandian, the son of Amadis, of Gaul.*" The following extracts from this once popular volume will show how the name occurs:

> "Know that on the right hand of the Indies there is an island called California, very near to the Terrestrial Paradise, which was peopled by black women, without any men among them, because they were accustomed to live after the manner of the Amazons. They were of strong and hardened bodies, of ardent courage, and of great force. The island was the strongest in the world, from its steep rocks and great cliffs. Their arms were all of gold, and so were the caparisons of the wild beasts they rode."

"In the island called California are many griffins, on account of the great savageness of the country and the immense quantity of wild game to be found there."

An opinion prevails among some well-informed authors that the name is derived from the Latin words *calidus fornus*, meaning *hot oven;* and that the idea was taken from the hot furnaces, or sweat-ovens, into which the natives put their sick, or from the hot valleys of the country: indeed, certain cañons and small valleys in California are almost hot enough in summer time to suggest such an idea; but as the State received its name before civilized man had beheld the land, Cortez had invaded Mexico, Balboa discovered the Pacific ocean, and Magellan first navigated its waters, it is supposed that the name California was the coinage of the brain of the novelist mentioned. The fabulous stories circulated by the early Spanish navigators respecting the riches of the newly discovered country, and the great natural productiveness of the soil, and its minerals, may have suggested the name, from the Greek words *Kala-chora-nea*, meaning a rich or fresh productiveness, fertility; opposite to *Aphoria*—sterility or unproductiveness. In this view, the application of the name is most suggestive and appropriate.

Centuries before the discovery of the American continent, and while the early navigators of Europe made their tedious voyages to the Indian ocean and the Red sea, the stories of the discoveries of distant lands and strange people were the staple of the romantic and fabulous tales related about the "Terrestrial Paradise" and the "Land of Gold," its marvellous wonders and strange people. The fictions of the ancients and heathen mythology were freely employed to lend charms and wonder to the distant and strange land; and, to fulfil the idea of the ancients as to the keeper of the precious metals, the Spanish novelist already quoted assured his readers that the imaginary animal, the griffin—half lion and half eagle—which was supposed to watch over mines of gold and hidden treasure, had its abode in California.

That the reader may realize the absurdities of these early times, and the notions of the people respecting this then unexplored land, a few additional extracts are here given from some of the early explorers of the South Pacific, who had worked up their imaginations respecting the fabled land of gold. One writer, describing the dangers of the seas, says:

> "The crew and passengers consume their provisions, and then die miserably. Many vessels have been lost in this way; but the people have learned to save themselves from this fate by the following contrivance: they take bullocks' hides along with them, and whenever this storm rises they sew themselves up in the hides, taking care to have a knife in their hand; and, being secure against the sea-water, they throw themselves into the ocean. Here they are soon perceived by a large eagle called a griffin, which takes them for cattle, darts down and seizes them in his gripe, and carries them upon dry land, where he deposits his burthen upon a hill or in a dale, there to consume his prey. The man, however, now makes use of his knife to kill the bird, and creeps forth from the hide. Many people have been saved by this stratagem."

Another traveller, Sir John Maundeville, speaking of the strange lands he had visited, and doubtless California was one of the islands alluded to, (California was considered an island by its first discoverers,) says:

> "In one of these isles are people of great stature, like giants, hideous to look upon, and they have but one eye, which is in the middle of the forehead; and they eat nothing but raw flesh and fish. And in another isle, toward the south, dwell people of foul

stature and cursed nature, who have no head, but their eyes are in their shoulders. In another isle are people that have the lip above the mouth so great that, when they sleep in the sun, they cover all the face with that lip. And in another isle there are dwarfs which have no mouth, but instead of their mouth they have a little round hole, and when they shall eat or drink they take it through a pipe or a pen or such a thing, and suck it in. And in another isle there are people that have ears so long that they hang down to their knees, [a tribe of Oregon Indians split the ear, allowing the outside which was cut from the top to hang down, thus making the ears to hang down to the shoulders.] In another isle there are people that have horses' feet. In another isle there are people that go upon their hands and feet like beasts, and are all skinned and feathered, and would leap as lightly into trees and from tree to tree as squirrels or apes. In another isle are hermaphrodites; and in another isle are people that go upon their knees, and at every step they go it seems that they will fall: they have eight toes on every foot. Many other diverse people of diverse natures there are in other lands about, of which it were too long to tell.

"Of Paradise I cannot speak properly, for I was not there. 'Tis far beyond Cathay, [China,] and I repent not going there, but I was not worthy. But as I have heard say of wise men beyond, I shall tell you with good will. Terrestrial Paradise, as wise men say, is the highest place of the earth; and it is so high that it nearly touches the circle of the moon there, as the moon makes her turn. . . . . And you shall understand that no man that is mortal may approach to that Paradise: for by land no man may go for wild beasts that are in the deserts, and for the high mountains and great huge rocks that no man may pass by for the dark places that are there; and by the rivers may no man go, for the water runs so roughly and sharply, because it comes down so outrageously from the high places above, that it runs in great waves, that no ship may row or sail against it, and the water roars so, and makes so huge a noise, and so great a tempest, that no man may hear another in a ship, though he cried with all the might he could. Many great lords have essayed with great will, many times, to pass by these rivers toward Paradise, with full great companies, but they might not speed in their voyage; and many died, from weariness in rowing against the strong waves, and many of them became blind, and many deaf, for the noise of the water, and some perished and were lost in the waves; so that no mortal man may approach to that place without special grace of God: so that of that place I can tell you no more."

Cortez having, in 1521, completed the conquest of Mexico, turned his attention to exploring the western side of his new acquisitions; and at this period we find the Gulf of California called by its present name, and also the "Sea of Cortez." That California was the land mentioned by the novelist in 1510 cannot be doubted, as California was considered an island, and placed upon the maps and geographies as such, until the expedition of the Viceroy of New Spain, in 1686, more than a century and a-half after Cortez visited the country, and discovered and reported it to be a part of the mainland of the continent of America.

The State of California extends from latitude 32° 45′ to latitude 42°; is a little over eight hundred miles in length, and twelve hundred miles, following the chief indentations of the coast. It is an average width of two hundred miles from the Pacific ocean to the crest of the Sierras, the eastern boundary; and contains an area of 188,981 square miles, or 120,947,840 acres.

California is bounded on the north by the State of Oregon, on the east by the State of Nevada and Territory of Arizona, on the south by the republic of Mexico, and on the west by the Pacific ocean.

The combined area of the six New England States is but 68,348 square miles, showing that California has an area almost three times as great as this division of the republic.

The area of the six Middle States—New York, New Jersey, Pennsylvania, Delaware, Maryland, and West Virginia—is 137,464 square miles; showing that the area of California is 51,517 square miles larger than this section.

The combined area of the twelve States forming the New England and Middle States is 205,812 square miles, showing that California contains an area almost as great as these twelve States. It is 78,135 square miles larger than the whole of Great Britain; the latter being 110,846 square miles. It would make twenty-four States the size of the State of Massachusetts, leaving 2,781 square miles; and the area of California would make *one hundred and forty-five States as large as the State of Rhode Island.*

The combined area of Great Britain, Holland, Greece, Denmark, Brunswick, and Switzerland is 188,330 square miles, leaving the area of California 551 square miles larger than these six European countries.

The area of Andorra, Anhalt, Baden, Belgium, Bremen, Brunswick, Papal States, Denmark, Frankfort, Greece, Hamburg, Hanover, Hesse-Cassel, Hesse-Darmstadt, Hesse-Homburg, Holland, with Luxemburg, Lichtenstein, Lippe-Detmold, Lippe-Schaumburg, Mecklenburg-Schwerin, Mecklenburg-Strelitz, Nassau, Portugal, Reuss, San Marino, Saxony, Saxe-Altenburg, Saxe-Coburg and Gotha, Saxe-Meining-Hildburg, Saxe-Weimar-Eisenach, Schwarzburg, Rudolstadt, Schwarzburg-Sondershausen, Waldeck, Lubec, Wurtemberg, Switzerland, and the republic of Hayti—thirty-seven countries of Europe and one republic of America, (West Indies,)—embraces a total of 189,273 square miles—a fraction only more than the area of California.

The population of the *thirty-eight countries* alluded to is, in round numbers, thirty million; while the population of California, by the census of 1870, was but 560,247

—a little less than three persons to each square mile. So genial the climate, so productive the soil, so early the maturity of cattle, so rich in precious metals, so great the water-power—in a word, so great the natural resources of California, when compared with the countries already alluded to—that eighty million of people could be easily maintained upon her soil. But California is capable of sustaining a larger population; and, that the reader may comprehend what may possibly be the population of this vast region, and to what population and power California may yet attain, it is but necessary to present a few further illustrations from some of the most popular countries of Europe. The area of Great Britain is 110,846 square miles, and her population thirty-two million. This would be 286 persons to each square mile. Now let us see what this density would give California: at the rate of 286 to each mile, California would have a population of 54,048,566. But California can even do better than that: she can surpass the largest density of any country of Europe. At the present period, (1872,) Belgium, the most densely populated country of Europe, has a population of 440 persons to each square mile of her whole area of 11,313 square miles. Belgium must still continue to grow more dense in population; but, with her present density in California, the State would have a population of 83,151,640, or more than double the population of every State and Territory in the American republic; the federal census giving the whole population of the republic at 38,281,384 in 1870

Of the 120,947,840 acres in the State of California, but 32,338,378 acres have been surveyed. There are 7,095,714 acres covered by Mexican grants, 5,023,714 acres of which have been confirmed, and patents issued by the government, leaving 2,071,825 acres of the claims reported for action not yet patented. Outside of all lands granted by the federal government and the lands covered by the Mexican grants there are yet (1872) 100,070,177 acres of public lands in the State.

Year after year the arable lands of the State seem to widen: mountain ridges and high, rolling hills, regarded as worthless a few years since, are found by experience to be excellent farm-lands, producing grain, vegetables, and fruit of almost every description; and, under a diversified cultivation and the agricultural skill and labor of European farmers, thousands of acres yet considered worthless will be made most productive. So far but a fraction of the land of the State has even been surveyed, and rich and fertile valleys are to-day without a furrow ever having been turned. But three million acres are cultivated, and five million acres enclosed, (1872,) within the whole State. *Twenty million bushels* of wheat are grown annually, and to pasture the three and a half million sheep, two hundred and fifty thousand horses, and eight hundred thousand neat cattle in the State, occupies wide ranges of untilled and unfenced land.

It is difficult to give any correct classification of the lands of the State. It is estimated, however, that sixty-five million acres are susceptible of cultivation; twenty-five million acres of pasture lands; fifteen million acres of mountain, forest, and rugged hills; six million acres of sandy, gravelly, and alkaline plains; five million acres of overflowed, salt-marsh, and tide lands; and 4,947,840 acres in lakes, rivers, and bays.

To know whether California is capable of sustaining

NIGHT SCENE ON THE SAN JOAQUIN RIVER—MONTE DIABLO IN THE DISTANCE.

NIGHT SCENE ON THE MAIN BRANCH OF THE SACRAMENTO RIVER.

THE FORD OF THE YO-SEMITE.

VIEW OF MOUNT SHASTA, THIRTY MILES DISTANT.

a population of the density of any of the countries here mentioned it is only necessary to be informed that, in natural resources, the most densely populated country above named is vastly inferior to this State, whose balmy climate permits of out-door labor and cultivation of the soil every day of the year, and whose rich and inexhaustible soil produces so abundantly and luxuriantly. Her fields of wheat yield from fourteen to one hundred bushels to the acre—forty to sixty bushels being considered a good yield, and twenty-one bushels to the acre the average of the State; whilst in most of the countries of Europe and the Eastern States of America from eight to fourteen bushels to the acre is considered a good crop, while many of them average only from five to six bushels to the acre.

The unparalleled productions of vegetables, fruit, and grain, with the ease of cultivation, the perpetual summer, time saved from building warm houses and procuring food and shelter for cattle, fuel and raiment for man, the freeness of the agricultural lands from either forests or rocks, the absence of worms and disease in fruit and grain, the abundance of wild grass and wild oats, the early maturity of fruit trees and cattle, the great water-powers, whose crystal spray is never congealed by winter's frosts, the healthful and vigorous condition of man and beast—all assure us that California is capable of producing from her soil the means of sustaining a population of *three times* the density of any of the countries or States named in this chapter.

The natural resources, great mineral and agricultural wealth of California, with her eight hundred miles of sea coast indented with numerous bays and harbors, facing the Pacific ocean, the direct and easy steam communication with Asia and the islands of the Pacific, the railroad connection with the Atlantic States, all place her midway in the direct line of trade between Asia and Europe, and render her geographically one of the most favorably located States in the Union.

The country is divided into hundreds of valleys by ridges and chains of mountains. The principal mountains are the Sierra Nevada range, running about four hundred miles along the eastern boundary in the northern portion of the State, and the Coast Range, following the course of the ocean along its western line the entire length of the State. Toward the southern section of the State the chain is often broken and intersected with streams, cañons, and small, fertile valleys. At some places, as in Marin county, on the north side of the Golden Gate, this range of mountains pushes almost to the ocean; but its *general course* is from twelve to twenty miles from the sea, leaving a belt of rich agricultural and grazing land between it and the Pacific. This section of the State is entirely different in climate from the interior: during the hot summer months, the fogs and vapor from the ocean hang in dense volumes over it, cooling the air, and keeping vegetation green through the entire dry season. The harvest in this section is several weeks later than in the valleys of the interior. Here, too, is the great dairy and pasture range of the State. South of Santa Cruz, this ridge is to a great extent barren of trees, or covered with an inferior growth of timber; but west of this point, and particularly through the upper portions of the State, it is crowned with valuable forests of cedar, fir, redwood, and oak. The valleys upon both sides of this range are well watered with thousands of crystal streams, running from the ridges of the mountains either toward the interior or emptying into the Pacific ocean. Trout are abundant in all these streams. This chain averages in height from two thousand to six thousand feet above the level of the sea, and in width from fifteen to thirty-five miles.

The grand mountain chain of the Sierras, marking the eastern boundary of California for more than four hundred miles south from the Oregon line, often broken and irregular, in its general features of natural grandeur presents varied themes of reflection and observation, as being the main artery or back-bone from whose lateral spurs and rugged sides emanate the great gold and silver supply, which exists not only in California and Nevada but which, following the general line of this range, supplies the vast mineral wealth from Patagonia through South and Central America, Mexico, California, Oregon, Washington Territory, and British Columbia, until it is lost in the eternal snows of Alaska's lonely shore on the distant confines of the Arctic ocean.

In this grand range of mountains in California are found the highest elevations in the republic except those in Alaska—Mount Whitney being higher than Mount Hood, or the highest peaks of the Rocky mountains. Here Mount Shasta lifts its hoary head 14,440 feet; and Mount Whitney, the loftiest mountain of the range, stands fifteen thousand feet above the sea-level. Here, too, stand the solemn sentinels of the forest, the mighty trees of Mariposa, Calaveras, Tuolumne, and Tulare, the most gigantic vegetable growth in the world, the wonder and admiration of all who behold them, dwarfing into comparative insignificance the cedars of Lebanon and the pines and firs of the Baltic and the

Saco. Here, too, may be seen the famed valley and falls of the Yosemite, where, at a few bounds, the mighty sheet of water dashes a distance of two thousand five hundred and twenty-six feet into the valley below. High in the ridges of this chain, nestling betwixt the precipitous and frowning walls of dark and relentless granite, nature elevates her mighty urns, which, like inland seas, inspire and impress man with the majesty of creation, as he floats upon their placid waters, or in vain attempts to sound their almost fathomless depths. Here the Sacramento, San Joaquin, and Klamath rivers have their source. Down the sides, ridges, spurs, and gorges of this range, and its foot-hills and gulches, the men of every clime search for gold; and, up from the parched and arid plains and heat of summer, man and beast seek cooling fountains of pure water and new life, in the rich verdure and changing scenes of the charming Sierras, whose grandeur of mountains, granite domes, cascades, lakes, forests, and foliage surpass in natural beauty the forests and glaciers of the Alps and the fascinations of Como, Neufchatel, and Lucerne.

# CHAPTER XIV.

Mountains—Sierra Nevadas—Winter, spring, and summer in the Sierras—Snows of the mountains—Farming, lumbering, and grazing in the Sierras—Forests—Big trees—Shrubs—Plants—Flowers—Grasses—Poison oak.

THE description already given of the Coast Range and Sierra Nevada mountains will have sufficiently defined the two great mountain ranges of California.

For the better information of the reader, a description of the principal mountains of the State, with the counties in which they are located, is here given. In the description of the several *counties*, the leading features of interest—as the valleys, forests, mountains, lakes, and rivers—are more minutely described.

In the Coast Range, the following are the principal peaks: *Tamalpais*, Marin county, 2,597 feet; *Monte Diablo*, Contra Costa county, 3,856; *Mount St. Helena*, Napa county, 4,343; *Mount Hamilton*, Santa Clara county, 4,443; *Mount Pinos*, Santa Barbara county, 7,300; *Mount San Bernardino*, San Bernardino county, 8,500; *Mount Ripley*, Lake county, 7,500; *Mount Downey*, Los Angeles county, 5,675; besides many other mountain peaks in this range of from four thousand to five thousand feet.

The chief mountains in the Sierra Nevada range, in California, are the *volcanic cones* near Mono lake, Mono county, 9,300 feet; *Dome mountain*, Tulare county, 9,825; *Lassen Peak*, Shasta county, 10,577; *Silver mountain*, Alpine county, 10,934; *Mount Hoffman*, Alpine county, 10,872; *Cathedral Peak*, Mariposa county, 11,000; *Mount Silliman,* Tulare county, 11,623; *Castle Peak,* Mono county, 13,000; *Lyell Peak,* Mono county, 13,217; *Mount Dana,* Mono county, 13,227; *Mount Brewer,* Mono county, 13,886; *Mount King,* Fresno county, 14,000; *Mount Shasta,* Siskiyou county, 14,440; *Mount Tyndell,* Tulare county, 14,386; *Mount Williams,* Tulare county, 14,500; and *Mount Whitney,* Tulare county, 15,000, the highest mountain in California.

The two main chains of mountains in California—the Coast Range and the Sierras—are not of the barren and desolate character that many might suppose. The Coast Range, southward of the Golden Gate, presents many rugged, wild, frowning, rocky crags, and bald, granite peaks; but the general range of this chain is filled with rich ravines and small valleys, and even the rolling hills, high above the clouds and fog-banks of summer, are in many places rich in deep soil, covered with a luxuriant growth of wild oats, grass, and flowers, well suited to agriculture or grazing, well wooded, and abounding in beautiful, never-failing streams of water.

The Sierra Nevadas, averaging from fifty to seventy miles in width and over four hundred and fifty miles in length in California, are by no means a desert of eternal snow and frowning granite: on the highest ridges, deep snow falls during the winter months, but the climate in the entire range is not so cold as in the State of Virginia or portions of Kentucky during the corresponding months. The snow-fall in this range begins toward the end of November, and continues through the winter months until April, during which, upon the high ridges, there is a snow-fall of from ten to forty feet, but on the middle and lower ranges only of a few feet, which disappears in April, when spring opens balmy and pleasant. Hundreds of thousands of acres of this range is deep loam soil, fit for agriculture, with rich meadows from which are cut large quantities of hay. This district affords the finest pasture-range in summer on the whole coast. In this range, also, down its rugged sides, are the vast forests of firs, oaks, and pines, which will be found more fully described under the head of "Forests" further on.

Snow almost entirely disappears from the Sierras in summer. By the middle of July, not a trace of winter can be seen except in a few isolated spots, where, high up in the clouds, clinging to the northern side of some towering peak, may be seen small patches of snow, as if dodging and hiding from the powerful rays of the sun, which through the long summer pours down its scorching floods of light and heat, melting all before it and parching the valleys below.

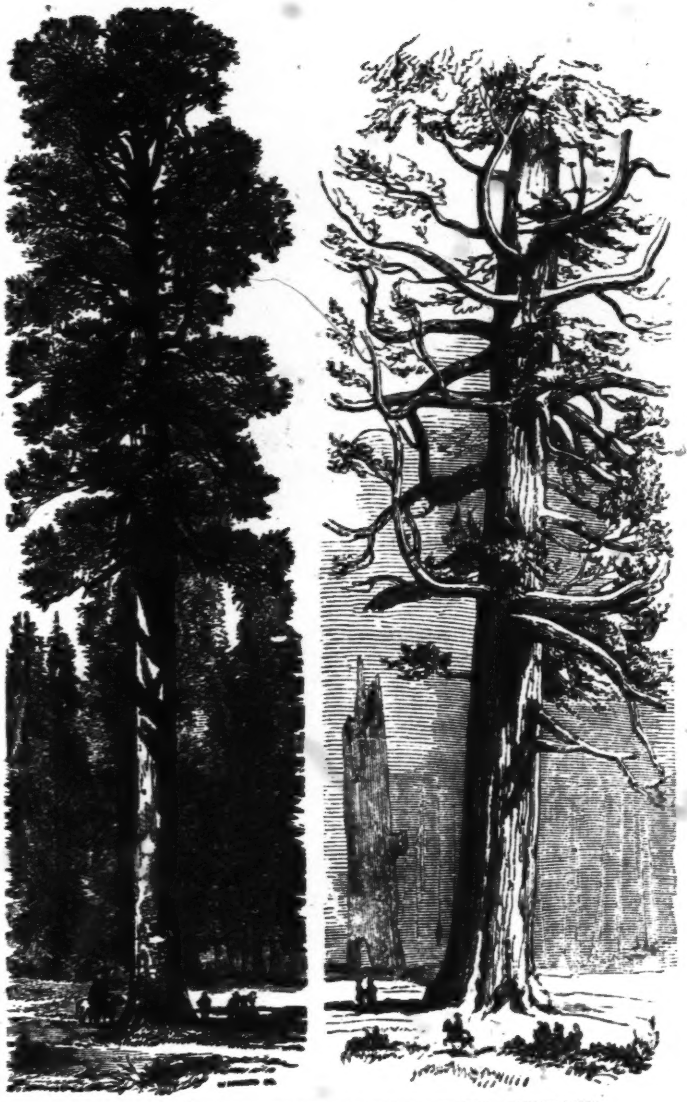
Farming, lumbering, and grazing are carried on with success in this range. Indeed, it is yearly becoming the resort of the tourist, and thousands of the citizens of the towns and villages of the scorched plains of the lower country repair hither in the summer months, to bask beneath the luxuriant foliage, angle in the streams, float upon the placid lakes, gaze upon the towering columns of the smooth granite and slate mountain peaks, which, like cathedral domes, lift their imposing heads above the clouds; or wander upon the verdant lawn, in admiration of the mysterious wonders and beauties of the famed Yosemite, whose ever-changing scenes of gauzy vapor, and dancing, fickle rainbows, present scenes more like the fabled dreams of fairy land than the realities of earth.

## FORESTS.

The greater part of the State of California (except the high mountains) consists of rolling hills, rich and fertile valleys, swamp and overflowed lands, and is entirely free from rock; and, as far as the eye can reach, in all directions, without tree or shrub of any kind, except a fringe of willow or cottonwood about the edges of the streams and springs, a few clumps of broadspread oaks in the valleys, or straggling ones about the ravines and cañons of the hills.

Along the Coast Range, the Sierras, and the various smaller mountain chains and ridges, forests of oak, pine, white and red cedar, cypress, laurel, fir, and other species are abundant west of Santa Cruz; south of this point, in the Coast Range, timber is confined chiefly to scattering trees or a few groups of inferior growth. Redwood—a species of cedar—grows in great profusion, is of common use in house-building, and forms a staple commercial lumber throughout the State. This tree grows to a great size: one in Santa Cruz county is two hundred and seventy-five feet in height and nineteen feet in diameter. Many trees can be found among this class of from one hundred and fifty to two hundred and fifty feet in height, and six, eight, ten, and fourteen feet in diameter. The wood is of a reddish color, very free from knots, and splits easily; is very durable, although not very strong.

Common to the Coast Range, valleys and hills, is a great variety of trees and shrubs of variegated and beautiful appearance, differing very essentially from the same species in other countries; many of them entirely confined to the State of California. In the large variety in the State are the wild nutmeg, ironwood, poplar



“BIG TREES,” MARIPOSA AND CALVERAS GROVES, CALIFORNIA.

(First tree, 350 feet high and 28 feet in diameter; Second tree 386 feet high and 31 feet in diameter.)

NEVADA FALLS, YOSEMITE VALLEY.
(700 feet high)

THE PIONEER'S CABIN: "ROOM FOR THIRTY INSIDE."

white cedar, cypress, Monterey pine, walnut, willow, dogwood, cherry, white maple, in the southern coast; throughout the central and northern part of the State may be found the yew, chestnut, ash, alder, cottonwood, manzanita, madroña, laurel, chinquapin, oak, sycamore, balsam-fir, spruce, cedar, sugar and other pine, walnut, dogwood, crab-apple, buckthorn, lilac, cherry, plum, grape-vine, vine-maple, and *sequoia*, (mammoth tree.)

It will be observed that California is destitute of many of the species of valuable timber of the Atlantic States and Canada, such as beech, birch, sugar-maple, hemlock, juniper, elm, and hickory. To compensate in some degree for the loss of those valuable forest trees California has many species peculiar to her soil, not to be found in any other part of the globe; indeed *all* her trees, flowers, and shrubs seem to be different from those in any other country, many of the former supplying the finest quality of cabinet and house timber.

### THE BIG TREES.

These are found only in the Sierra range, and chiefly in the groups of Calaveras, Mariposa, Tuolumne, and Tulare counties. They stand in solitary grandeur, as the most gigantic specimens of vegetable life on the globe. These giants of the forest stand in the valleys nestled in this chain of mountains at an elevation of from four thousand to five thousand feet above the sea; and as no vegetable life exists in this range above nine thousand feet altitude, their tops are much below that range. There are seven distinct groups of these mammoth trees—three in Mariposa county, two in Tulare, and one each in Tuolumne and Calaveras counties. The group in the latter county was the first discovered, and possesses among its numbers the tallest tree known in the State.

To persons who have not visited the Pacific coast and seen the immense forests of California, Oregon, and Washington Territory, a description of these forests of the Sierras sounds like romance. To the lumbermen of the Baltic and Penobscot, who look upon a pine of eighty to one hundred feet high and three to six feet in diameter as a *monster*, a description of the "Big Tree Grove" of Calaveras county, some of the trees of which are four hundred and thirty-five feet in length and one hundred and ten feet in circumference at the base, or more than thirty-three feet in diameter, must seem ridiculous. One of these monsters was cut down some years ago, by boring with long augers, which occupied five men constantly for twenty-two days, equal to one hundred and ten days labor of one man; the stump, levelled and planed off, being twenty-seven feet in diameter, has often been the scene of cotillion parties and festive gatherings—not of children, but of full-grown, able-bodied California men and women. Another of these giants now fallen is hollow, forming a tunnel so large that parties have often rode into it on horseback for seventy feet, turned the horse around and rode out without dismounting. The top is broken off, and two horsemen can ride abreast through this tree for its entire length without stooping.

These trees grow in a deep, rich soil; the wood is soft, light, and dry, splitting freely, of a reddish color, and is valuable for building purposes; it much resembles red cedar.

The Calaveras grove is situated in Calaveras county, between the Stanislaus and Calaveras rivers, twenty miles east of Mokelumne Hill, and 4,760 feet above the sea-level. There are ninety-two of the "Big Tree" species in the group; ten of them are over thirty feet in diameter, and eighty-two of a diameter from fifteen to thirty feet, ranging from two hundred and forty to three hundred and sixty-six feet in height. A list of twenty-five of the largest trees of the Calaveras group is here given, with the names:

| Names of the Trees. | Height in feet. | Circumference six ft. above the roots. | Names of the Trees. | Height in feet. | Circumference six ft. above the roots. |
|---|---|---|---|---|---|
| T. Starr King | 366 | 50 | Bay State | 280 | 48 |
| General Scott | 327 | 45 | Old Kentucky | 277 | 45 |
| General Jackson | 320 | 42 | Empire State | 275 | 50 |
| Two Sentinels, (front of hotel) | 315 | ... | Andrew Johnson | 273 | 32 |
| Salem Witch | 310 | ... | Daniel Webster | 270 | 49 |
| Trinity | 308 | 48 | Mother and Son | 269 | 64 |
| Mother of the Forest | 305 | 63 | Edward Everett | 265 | 46 |
| William C. Bryant | 305 | 49 | Pride of the Forest | 260 | 50 |
| Henry W. Beecher | 291 | 45 | Vermont | 259 | 41 |
| Granite State | 286 | 50 | John Torrey, (nobis) | 259 | 35 |
| General Washington | 284 | 52 | Arborvitæ Queen | 258 | 31 |
| Abraham Lincoln | 281 | 44 | Beauty of the Forest. | 258 | ... |
| | | | Henry Clay | 241 | 44 |

The Mariposa group, in Mariposa county, is situated about thirty miles southeast of the town of Mariposa. It consists of four hundred and twenty-seven trees, varying in size from two hundred and seventy-five to three hundred and twenty-five feet in height, and from twenty to thirty-four feet in diameter. They extend over an area of about five hundred acres, about six thousand feet above the level of the sea. One of these giants now prostrate indicates a length of four hundred feet, and a diameter of about forty feet. "The Grizzly Giant" is the king of this group, being about thirty-four feet in diameter, and three hundred and twenty-five feet in height. There are three other groups in this county, near the Mariposa grove: one contains eighty-six and the other thirty-five mammoth trees, averaging about the diameters of those already described.

Throughout Tuolumne county groups of the "Big Trees" are found; and still further south, in Tulare county, at an elevation of about sixty-five hundred feet, and about forty-six miles northeast of the town of Visalia, scattered over a range of fifty miles in length, hundreds of these trees are found; and, although the average height is not so great as those of Calaveras and Mariposa, some now prostrate are as great in girth as the largest in the State. The largest standing tree of this group is two hundred and seventy-six feet in height, and one hundred and six feet in circumference; a portion of it had been burnt away; originally its girth is supposed to have been about one hundred and twenty feet.

Not the least remarkable about these mountain monarchs is their age, ascertained by scientific observation to be in some cases from one thousand to three thousand years; and still there they stand, in primeval majesty, defiant of sun, rain, frost, and storms, unencumbered by branches, erect, well proportioned. In their crowns of evergreen they look down from their aerial heights upon their offspring, young giants in the bud or a few hundred years of age, struggling for the mastery over the oak and sturdy pitch and sugar pine, soon to be dwarfed in comparison, as the young *sequoia* lifts his arms into the clouds.

SECTION OF MAMMOTH TREE, CALIFORNIA.
(31 Feet in diameter.)

A COTILLION PARTY OF THIRTY-TWO PERSONS DANCING ON THE STUMP OF THE MAMMOTH TREE.

## SHRUBS, PLANTS, FLOWERS, AND GRASSES.

Of the classes of indigenous shrubs, plants, flowers, and grasses there is a great number and a great variety, many of them of much beauty, fragrance, and value. Alder, cottonwood, lilac, wild cherry, plum, grape, bamberry, current, blueberry, (a few of this latter, only in the Coast Range,) strawberries, raspberries, blackberries, salmonberries, tar-weed, white lervisia, pitcher-plant, soft arnica, wild flax, and wild mustard abound all over the coast, valleys, and hill-sides. The wild mustard grows in great fields, or forests, some of the stalks attaining twelve and fourteen feet in height, with branches, to which a horse can safely be hitched, and upon which the birds lodge. The berry of this plant attains a size, quality, and perfection unequalled in the world; and the gathering of it of late years has proved a source of profitable employment to thousands of people. There is enough mustard growing wild in California to supply the market of the whole world.

## POISON OAK.

The poison oak of California exists pretty generally over the State; but *abounds* in the lower valleys and Coast Range. Generally it is a little, straggling shrub, three or four feet high, with dark red, glaze-like leaves; in the shade of trees, it climbs like a vine, the leaves being broader and of a light green. Many persons are affected by this poisonous shrub, either by coming in contact with it or having its poisonous gases carried in the air; it generally affects the face and exposed parts with swelling and itching, which is very painful and unpleasant. Those persons subject to this affliction are liable to repeated attacks; and, as but little is generally known about the treatment necessary, some of the most effective remedies are here given, all of which are simple and applied externally: constant applications of hot water to the parts affected, steam or hot baths, warm solutions of sugar of lead, water of ammonia, warm vinegar and water; all applied as hot as can be comfortably endured. On the authority of *Dr. Colbert A. Canfield*, of California, a recipe is here given, which beyond doubt is most effective: a decoction made by stewing either the dried or green leaves or by rubbing the bruised green leaves of the *grindelia*, a plant growing in many parts of California, especially in the south. It is a tall perennial belonging to the composite family, and looks like a small sunflower. It is from one to two feet high, has bright yellow flowers in heads of one or two inches in diameter; the buds, and even the leaf, contain a sticky balsam or resinous matter; its medicinal qualities are supposed to be contained in its resinous or balsamy matter. It has long been known to the Indians and native Spanish of California, not only as a cure for poison oak, but in many skin diseases, as salt-rheum, nettle-rash, and many others. A small quantity of this herb gathered in season, and kept in every family, would, if properly applied, save much anxiety and suffering from the effects of poison oak.

Of the grasses and plants, many species abound, but in no part of the State do they form a *sod:* the roots die out by the heat of summer, except with the "bunch grass," which grows in many parts of the whole Pacific coast, springing from the roots, and forming large and high clumps. It affords excellent pasturage, and the new crop is generated from the seeds which fall into the crevices of the earth, and start immediately after the first rains in November. In February, March, April, May, and June, the whole country, hill-sides and valleys, seem to be covered with grass and clover, and for miles present a charming scene of shades and ridges of yellow, red, white, and variegated flowers.

The wild oats, which seem to grow everywhere, is a staple article of pasturage, and is cut in great quantities for hay. Its growth is very luxuriant, in many places as dense and tall as the best fields of cultivated oats. In seventeen years residence on the Pacific coast, the author has never seen a spear of timothy grown in California: the dry seasons kill the roots. I do not believe there is a spear of it growing in the State, unless in some small valleys in the Sierras, or where it is constantly irrigated during the summer months. Wild oats, oats, and barley, cut green, form the staple "hay" of California; and, strange to say, barley throughout the State is given to horses generally in preference to oats. Through Oregon and Washington Territory, timothy grows well; some fields along the Columbia surpassing the finest growth of the Atlantic States.

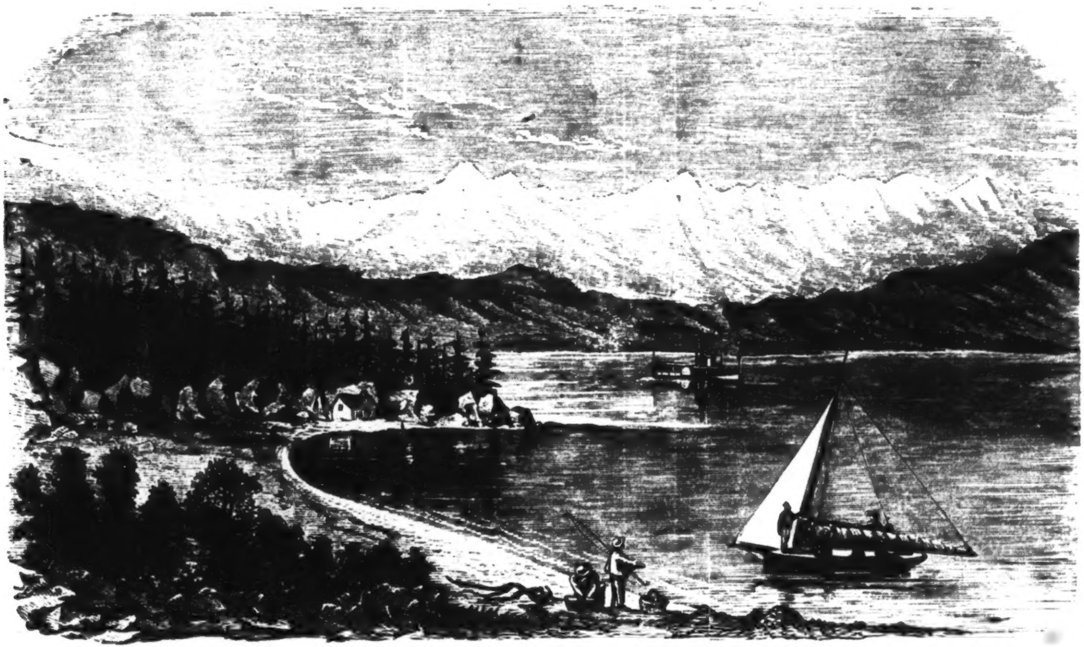
## CHAPTER XV.

Valleys—Trees, vegetables, fruits, flowers, grain, and grasses—Lakes—Alkaline and borax lakes—Dry lakes—Death valley.

### VALLEYS.

THE vast and fertile valleys of California, stretching over a length of country of seven hundred miles, form the richest and most variegated agricultural district in the world, produce almost every species of tropical and semi-tropical trees, fruits, nuts, herbs, flowers, and grasses, and yield most abundantly of wheat, barley, potatoes, fruit, and vegetables.

Nearly all the valleys of the State run parallel with the coast. The three chief are the San Joaquin, Sacramento, and Santa Clara; but the two last, in which are numerous others divided and subdivided within their general area of about five hundred miles in length by sixty in width, form the great agricultural field of California, completely enclosed between the Sierra Nevada and the Coast Range of mountains; these, running almost north and south for five hundred miles, nearly join by curving toward each other in Siskiyou county at the north, near the southern line of Oregon, and joining at the south in Los Angeles county, at Mount Pinos, leaving to the south and east of the Sierras the vast deserts and valleys of San Bernardino and San Diego counties, stretching east and south to the western line of Arizona, the river Colorado, and Lower California. A fuller description of the soil, area, &c., of these valleys will be found in the chapter descriptive



LAKE TAHOE, SIERRA NEVADA MOUNTAINS. (6,220 feet above the sea—21 miles long and 12 miles broad.)

of the several counties and of the agricultural resources of the State.

### LAKES.

There are twenty-two principal lakes in California, with an area of 29,641 square miles; besides innumerable small ones, some of very respectable size, of considerable depth, and of great natural beauty. Some, elevated high in the Sierras, contain crystal water, with abundance of fish, while others, low in the alkaline flats, are so acrid and bitter that no animal life can be found within their waters, floating on their surface, or partaking of their pungent fluid.

TULARE LAKE.—This lake is situated in Tulare county, its southern line being the western boundary of a portion of Kern county. It is about seventy miles directly east from the town of San Louis Obispo, which lies close to the Pacific ocean, in the county of that name, and one hundred and eighty miles south from San Francisco. This is the largest lake in the State, being thirty-three miles in length by twenty in width. The Sierra Nevada mountains being directly on the east of it, send down innumerable streams; many of which, such as Kings, Kern, and Elk, are of considerable size, and pour their floods into this lake, which forms the common receptacle of all the waters of a vast area of country. Strange as it may seem, there is no visible outlet to this great sheet of water. In the rainy season, the land upon the west and east sides, being low, is overflowed to a great extent, forming tule and swamp. It is supposed that there must be some subterranean outlet to this sheet of water.

GOOSE LAKE.—This is second in size of all the lakes in California, and is situated on the State lines of Oregon and California, about one-third in Oregon and two-thirds in California, in Siskiyou county, and about seventeen miles from the extreme northeast corner of the State. It is thirty-three miles in length by nine in breadth, and is surrounded by a richly timbered and agricultural country, but almost wholly uninhabited.

RHETT LAKE.—This lake is also in Siskiyou county, about eight miles east of Goose lake, and close to the Oregon State line. Its greatest length is about fourteen miles, and its width about eleven.

WRIGHT LAKE—Also in Siskiyou county, is six miles directly east of Rhett lake, and four miles from the Oregon State line. It is ten miles in length by five in width.

ALKALI LAKES.—Three lakes, bearing each the name of *Alkali*, are situated in the eastern limit of Siskiyou county, and east of the Sierras, running more than three-fourths of the width of the county, in a northerly and southerly direction, close to the State line between California and Nevada. They are in one of the richest agricultural valleys in the State. Innumerable streams running from the north and west empty into them; and, although these streams are of crystal purity, the water of the lakes is so alkaline that no living thing is found in them. Surprise valley, in which they are situated, contains some excellent agricultural land. The streams and lakes at certain seasons swarm with wild fowls, geese, ducks, and crane.

The most northerly of these lakes is fifteen miles south of the northern boundary of the State; its length is fifteen miles, and its width eight. The centre one is about three miles south of the northern one, and is sixteen miles in length and seven in width. The one farthest south is connected with the centre one by a strip of water of three miles in length. The lake is nine miles long and nine broad; a portion of it is in the northeast corner of Lassen county.

LOWER KLAMATH LAKE.—This lake is directly on the boundary line between California and Oregon—half in each State; and is high in the Sierras amidst rugged hills and the desolate table-lands of Siskiyou county. Its extent is fifteen miles in length by six in width, and is connected by a stream of five miles in length with Upper Klamath lake, lying directly north and in the State of Oregon, and with Rhett lake, in Siskiyou county, by a stream of nine miles in length.

LAKE TAHOE.—Fourth in size is this queen of the Sierras, whose frowning granite walls upon the one side and rich foliage upon the other have been the theme of romantic poets, enthusiastic tourists, and sighing lovers. It is situated high in the Sierras, one-half being upon each side of the boundary line between the States of California and Nevada, and partly in the counties of Placer and El Dorado. It is twenty-one miles in length by twelve in width, and 6,220 feet above the level of the sea, nestled up among the tall pines, firs, and oaks, and overtopped by the towering pinnacles and snow-capped crowns of the Sierras, which reflect their lengthened shadows upon its placid bosom, as the setting sun gilds in golden hues the rich, wild, but picturesque and beautiful scenery around. The wild and leaping surge and deafening roar of the Niagara may impress the beholder with the terrible power of Omnipotence; but to fill the soul with that sweet inspiration which calmly draws us into communion with the harmony of nature, the sublimity of perfection, and a contemplation of a better land, we must stand upon the silvery shores of Lake Tahoe, while, amidst a stillness sublime and awful, the rays of the morning sun like ribbons of gold dart through the chasms of the frowning mountains and through the dense forest, streaking with amber and golden sheen the placid blue waters, through whose transparent depths the landscape is mirrored below; or, at the close of day, beneath the deep shadow of the stern Sierras, watch the mountain monarch as he comes from his forest glen to bathe his parched lips in this grand aerial urn—God's fountain in the wilderness, to beautify His footstool and invigorate His creatures.

But Lake Tahoe is not always dreamy, calm, and placid: her fair smiles are often converted into frowns terribly threatening and uneasy. When the storm-cloud breaks over the Sierras, and the snow-flakes fly fast before the thickening gale, she dashes her angry foam in seething, fitful wrath upon the beetling rocks and green sward on the shores, striking with terror the unfortunate navigator, who, with his frail craft, is often submerged beneath its whelming waters.

The colors and transparency of this beautiful sheet of water are some of its principal attractions. The shore of the lake is a hard, grayish sand. The water, which is a pea-green, gradually deepens, leaving the bottom of the lake at eighty feet clearly visible; at about half a mile from shore, the color changes to a deeper green, but from first tinged with blue; about one mile from shore, and where the shade is a very deep green, it suddenly changes to an almost indigo-blue: the lines

MIRROR LAKE; WATKINS' AND CLOUDS' REST, YOSEMITE VALLEY, CALIFORNIA.

SENTINEL ROCK YOSEMITE VALLEY.
(4,500 feet high above the Valley.)

of these three shades or colors are as distinctly drawn as if painted.

For many years it had been supposed that this lake was bottomless; but recent soundings establish its greatest depth to be about fifteen hundred feet. Several small boats ply on the lake, either to fish for trout, which are abundant, or for the recreation of the guests at the *Tahoe House* or *Glenbrook House.* A small steamer, the *Governor Blaisdell*, plies upon it, for the accommodation and pleasure of travellers. Coming years will behold this rare gem of nature and its gorgeous scenery as the recreation-ground and watering-place of happy throngs of health and pleasure seekers.

CLEAR LAKE AND BORAX LAKE.—These sheets of water are in the centre of Lake county, about eighty miles directly north of San Francisco, forty miles from the ocean, east of the Coast Range, and about fifteen hundred feet above the level of the sea. The greatest length of Clear lake is about twenty miles; at both ends it is about eight miles in width, but contracts in the centre to about three miles. Close to the eastern side of this lake is Borax or Kayser lake, covering a surface of from two hundred to four hundred acres, according to the season. Great quantities of pure borax of the best quality are taken from the bottom of this lake.

MIRROR LAKE.—This fascinating miniature lake, situated in the famed Yosemite valley, formed by the spent waters of the Yosemite falls, bathes the foot of the North Dome, and covers a surface of about eight acres. It is noted for its transparent beauty. Here the overhanging mountains, trees, and foliage are all mirrored in the water below, as clear and lifelike as they stand upon its banks.

Owens Lake.—This lake is in Inyo county, two hundred and sixty miles southeast from San Francisco, and directly east of the principal chain of the Sierra Nevadas, in a country generally desolate and of little agricultural value. The extent of the lake is eighteen miles in length by eight in width. Owens river, a stream of pure water and considerable value, running from north to south, empties into this lake, the waters of which are so impregnated with alkali and chloride of soda that it is unfit for man or beast. Like most of the lakes in the southern section of the State it has no visible outlet, and is supposed to have some subterranean passage to the Pacific ocean.

Fall Lake.—This lake is situated in the extreme northeast corner of Shasta county. It is about four miles in length and three in width, and is in Fall River valley.

Swan Lake.—Swan lake is in the western border of Lassen county, close to Plumas county. It is six miles in length and three in width, and high among the hills of the Sierras.

Eagle Lake.—Eagle lake is centred in Lassen county. It is of very irregular shape, and, like Swan Lake, is high in the mountains. It is twelve miles in length and about eight in width. Its waters are shallow.

Honey Lake—Is twenty miles northeast from Eagle lake, is in Lassen county, and eight miles west of the boundary line between California and Nevada. It is very irregular in shape; is fifteen miles in length and nine in width. Its water is very shallow and of a saltish taste. It is situated in Honey Lake valley, a rich meadow and farming district; numerous streams empty into it, but it has no visible outlet. It derives its name from the honey-dew deposited upon the shrubbery and grass in its vicinity, by the honey-dew aphis, a species of bee sometimes found in desert and barren regions.

**Donner Lake.**—This beautiful sheet of water is in the southeastern corner of Nevada county, east of the main ridge of the Sierras, and twelve miles northwest of Lake Tahoe. It is four miles in length and one in width. The scenery and natural beauty of this lake are unsurpassed in the State; its shores are fast becoming a fashionable place of resort to the lovers of rural beauty.

**Clear Lake.**—Clear lake is near the southeast end of El Dorado county, sixteen miles south of Lake Tahoe. It is high in the Sierras, and its surroundings are beautifully picturesque. The area of this lake is two miles in length and one in width

**Truckee Lake.**—Truckee lake is a small but beautiful sheet of water in the Sierra mountains, sixteen miles directly west of the eastern boundary of the State, and twelve miles northwest of Donner lake. It is in Sierra county, close to its southern line; is about one and a-half miles in length and three-quarters in width.

**Highland Lakes.**—These are three lakes almost in the centre of Alpine county, on a high ridge of the Sierras, surrounded by most gorgeous and imposing scenery of deep forest and beautiful meadow. The waters of these lakes are clear and of great depth. They are about one and a-quarter miles in length each, and about three-quarters of a mile in breadth, and within one and a-half miles of each other.

Lake Elenor.—This is the principal lake in Tuolumne county, about eight miles from the northern line of Mariposa county, and a few miles from where the Tuolumne river falls twelve hundred feet. It is perched high in the rugged Sierras; is about two miles in length and one mile in width.

Mono Lake.—Mono lake is one of the most remarkable sheets of water in the world. It is situated in the northern part of Mono county, east of the Sierras, and nine miles west of the eastern State line, and one hundred and sixty-two miles due east from San Francisco. It is thirteen miles in length and eight miles in width. There are several islands in it; the two principal ones close together in its centre are two miles each in length and a mile in width. The lake is supposed to occupy the bed of an ancient crater, and its waters to be one thousand feet lower than formerly. Numerous streams empty into this lake, yet its water is so bitter and so impregnated with lime, salt, borax, and carbonate of soda that no living thing exists beneath or floats upon it; its surface is a kind of oily fluid, over which the winds pass without causing a ripple. The wild fowls which inhabit the marshes and streams in its vicinity never light upon or touch its waters. From its bottom are thrown volumes of water, from boiling springs beneath, with such violence that a boat cannot be kept upon its surface.

From the principal island in this lake open angry mouths, from which are emitted gusts of steam, gas, and smoke, which attest the unquenched fires below. The deserted aspect of its surroundings, the volcanic cones which lift their beetling heads thousands of feet above the sterile scene, all lend an aspect of desolation, well entitling this cauldron to the name of the "Dead Sea."

It would be well to notice here that one sign of life, and one only, is visible in this lake. In summer a small fly deposits its eggs upon the oily surface; soon, millions of small, whitish worms float thereon, drifting in windrows upon the shore, when they are gathered by the Indians, who make them a staple of food and consider them a luxury.

GUADALUPE LAKE—Is situated in the extreme western corner of Santa Barbara county, a little less than one mile from the Pacific ocean. It is a long, narrow sheet of water lying in a valley, extending in a westerly and easterly direction seven miles, and is about one mile in width.

BUENAVESTA LAKE.—This lake is in the Tulare valley in Kern county, eleven miles from its western line. It is nine miles in length and four and one-half miles in width.

KERN LAKE.—Directly east of Buenavesta lake, and connected by a narrow strip of water of about four miles in length, is Kern lake; its course being east and west, about eight miles in length and three and a-half in width. Both this and Buenavesta lake are connected by streams with Tulare lake, which is about forty-three miles north of them.

Dry Lakes.—From the western line of Los Angeles county on the Pacific ocean to the eastern boundary line of this State, in the centre of Inyo county, a distance of two hundred and twenty miles, thence southerly to the extreme southern boundary of the State, at the junction of the Gila and Colorado rivers, a distance of three hundred miles from Inyo county, and embracing the counties of San Diego, San Bernardino, Los Angeles, and the southern portions of Kern and Inyo, there is not a single lake of any size, although this area contains sixty thousand square miles, or more than one-third of the area of the whole State. The Sierra Nevada mountains are lost before they reach this tract, which, on its eastern line, is a dreary waste of alkaline plains and jagged volcanic peaks. A great portion of this area was at some remote period covered with water, as the numerous beds of dry lakes attest. There are eighteen of these lake-beds now dry in this tract, with an area of sixteen thousand five hundred square miles, including *Death Valley*, in the western corner of San Bernardino and the south end of Inyo county, and twelve miles from the eastern State line, embracing an area of forty miles in length and ten miles in width, a great portion of which is one hundred and fifty feet below the level of the sea, an ash-bed of burning sands and alkali dust.

DONNER LAKE, AND RAILROAD TUNNEL, SIERRA NEVADA MOUNTAINS.
(6,000 feet above the sea.)

# CHAPTER XVI.

Rivers—Bays—Harbors—Bay of San Francisco—Puget sound—Fort Point—Straits—San Quentin—Islands—Seal Rock—Cliff House—Sea-lions—Golden Gate: origin of the name.

## RIVERS.

In the whole coast line of California of seven hundred miles there are no rivers of any considerable magnitude or navigable importance, except the Sacramento and San Joaquin, and they empty into the Bay of San Francisco and have their outlet through the Golden Gate.

Sacramento River.—This is the principal navigable river in the State; its source is high in the Sierras, in the northern part of Shasta county, fed by innumerable streams which dash wildly through deep cañons and mountain gorges, falling more than five thousand feet in five miles. After reaching the lower agricultural country, it flows in a meandering stream of considerable magnitude, skirted by willows, oaks, cottonwood, and sycamore trees. In its serpentine windings, it passes through the counties of Shasta, Tehama, and Colusa, forming the county line between Sutter, Yolo, Sacramento, Contra Costa, and Solano, where it empties into Suisun bay, then into San Pablo bay, and through the Bay of San Francisco to the Golden Gate. Its general course is from north to south from its source to Sacramento City, which is about two hundred and forty miles; and from Sacramento to San Francisco, about one hundred and twenty miles, its course is from east to west. Steamers drawing three feet of water run from San Francisco to Sacramento, and those drawing fifteen inches run from Sacramento to Red Bluff, in Tehama county, two hundred and forty-seven miles from San Francisco.

San Joaquin River.—The source of this river is in the Sierras, in an opposite direction from that of the Sacramento, and in the extreme eastern part of Fresno county. Its course is from east to west, and for its first fifty miles it is fed by a number of mountain streams, which are of great volume and rush in precipitous descent through dark and frowning cañons. Passing through the western part of Fresno county, it reaches the fertile San Joaquin valley, through which it passes directly in the centre of Merced, Stanislaus, and San Joaquin counties, finally emptying into the Sacramento at Suisun bay. Steamers drawing five feet of water run upon this river to Stockton, at the head of tide navigation, one hundred and twenty miles from San Francisco, and boats of lighter draught ascend much higher up the river.

Feather River.—This river has its source in the rugged Sierras, in Plumas county, and is fed by numerous crystal streams which leap in wild cascades down abrupt descents through Plumas and Butte counties, until it reaches Oroville and Marysville: thirty miles below the latter it joins the Sacramento. Steamboats of light draught run from Sacramento to Marysville, a distance of fifty miles. The general course of the stream is in a southwesterly direction. The beds of this stream and its tributaries have produced millions of gold. It is not navigable.

Yuba River.—This river, which empties into the

Feather river at Marysville, has its source in the Sierras in the eastern part of Nevada county, and near the eastern boundary of the State. Its course through Nevada and Yuba counties is among deep ravines and gulches, and over the repositories of millions of gold. It is not navigable.

AMERICAN RIVER.—The American river, so famous in early days for its gold deposits, has its source near Lake Tahoe in the Sierras. It runs almost due west, and forms the line between the counties of El Dorado and Placer. It is a dashing stream, often passing through deep ravines and dark, shady forests. Running through the lower portions of Sacramento county, it winds slowly through the plain until it meets the Sacramento just above Sacramento City. It is not navigable.

There are a number of rivers emptying into the San Joaquin, having their source high in the Sierras, and running over and through deep gorges and cañons toward the south, and averaging from one hundred to one hundred and twenty miles in length; many of them are of great beauty and volume: among these are the *Cosumnes, Mokalumne, Calaveras, Stanislaus, Tuolumne,* and *Merced.*

KING'S RIVER.—King's river is a stream of much volume. Its source is in the Sierras in the eastern portion of Fresno county, and south of the San Joaquin. For the first fifty miles it rushes over precipitous rocks and mountain gorges; striking the Tulare valley, it courses sluggishly through the tule swamps until it empties into Tulare lake. This river is about ninety-five miles in length.

KERN AND BRAVO RIVERS.—Both these rivers have their source in the lower end of the Sierra range, in the eastern part of Tulare county. They carry a considerable body of water through rough cañons and gorges, until they meet the tule lands of Kern county, where they empty into Kern lake, from which to their source they are more than one hundred and twenty miles in length.

OWENS RIVER.—This river issues from the White and Palisade mountains, east of the Sierras and close to the eastern line of the State, in Mono county, hundreds of little streams from both sides of these mountains swell its volume, its course being southwest, until it empties into Owens lake. This river is about one hundred miles in length, but is not navigable.

MOHAVA RIVER.—The Mohava river issues from the San Bernardino mountains in the western part of San Bernardino county, sixty miles east from the Pacific ocean. Its course is nearly southeast a distance of one hundred miles, where it is lost in the *Sink of the Mohava*, in the southeastern section of San Bernardino county.

COAST RIVERS.—The rivers emptying into the Pacific ocean, with the exception of those principal ones whose outlet is through the Golden Gate, are but few, and not one navigable except for a short distance by small craft of light draught. There are seven small streams that empty into the ocean from San Diego county, the most southern county of the State; none of them are of much importance, the greatest being about sixty miles in length. They are not navigable. *San Diego, San Bernardino, San Louis Rey*, and *Margarita* are the principal ones in this county.

Six small rivers and numerous *creeks* find their way from the Coast Range to the Pacific, the entire length of the State; six have an outlet through Los Angeles county: none of them are navigable. *Santa Ana* and *San Gabriel* are the chief ones, the former being about fifty miles in length. The Los Angeles is a branch, of considerable magnitude, of the San Gabriel; its course is from east to west.

In Santa Barbara county there are bu three rivers: they have their source in the Coast Range and empty into the Pacific ocean: none of them are of any importance. The *Santa Clara*, in the southern part of the county, has its source in the northern part of Los Angeles county; its length is about fifty miles. The *Santa Inez*, running almost due west and emptying into the Pacific ocean near the northern line of Santa Barbara county, is about seventy miles in length, and is fed by innumerable streams.

SANTA MARIA OR CUYAMA RIVER.—This river has its source in the eastern portion of Santa Barbara county, and forms the western line of that county for almost one hundred miles in its serpentine course in a direct westerly line to the Pacific ocean, where it empties at the Bay of San Louis. It is not a navigable stream.

CARMEL AND SAN JOSE RIVERS.—These two rivers have their source in Saint Lucia mountains, a chain of the Coast Range, in Monterey county. They are each about fourteen miles in length. Running northwest, they empty into the Pacific at *Carmel bay*, four miles south of the town of Monterey, in Monterey county. They are not navigable.

SALINAS RIVER.—This is the only stream of any importance west of the *Santa Inez* to this point. Its source is in the rugged Santa Barbara mountains, in the lower end of San Louis Obispo county, through the corner of which it passes in a northwesterly course the entire length of the county, thence through the centre of Monterey county to the Bay of Monterey and the Pacific ocean, where it finds an outlet. Its course for its entire length of about two hundred miles is along the coast line about fifty miles from the ocean; it is fed by numerous streams which water the fertile Salinas valley.

PAJARO RIVER.—This stream has its source in the southern section of the Mount Diablo mountains, in the southern part of Santa Clara county, running almost west. It forms the boundary line between the counties of Santa Clara, Santa Cruz, and Monterey. It is about forty miles in length, and empties into Monterey bay about twenty miles south of the town of Santa Cruz. It is not navigable.

The *San Felipe* is considerable of a stream, having its source in Santa Clara county, and emptying into the Pajaro river.

*San Benito river* has its source about the middle of Monterey county, running parallel with the ocean northwest for sixty miles; it empties into the Pajaro fourteen miles from its mouth.

SAN LORENZO RIVER.—The San Lorenzo is the only river in Santa Cruz county. It has its origin in the Coast Range, and runs south a distance of about fifteen miles and directly south of the town of Santa Cruz, where it empties into the Pacific ocean. From this point northward along Santa Cruz, San Mateo, and crossing the Golden Gate, thence the length of Marin county, there is not a stream of any note until reaching a third of the length of Sonoma county.

Russian River.—This river rushes down in considerable volume through the rugged peaks and cañons of the Coast Range; its source is midway in the county of Mendocino, and it is fed by a number of streams. For seventy miles its course is almost due south, when, at a point in Sonoma county, six miles from the northern corner of Napa county, it turns suddenly toward the west; passing through the centre of Sonoma county, it dashes in serpentine course through gulches of the Coast Range until it empties into the Pacific ocean. Westward from this point, for almost three degrees of latitude, along the northern half of Sonoma county, all of Mendocino county, and the southern half of Humboldt county, the whole coast line is indented with small rivers and creeks, none of which are of any importance; *Wallahalliu*, in Sonoma county, and *Nevarro*, *Albion*, *Grande*, and *Noyo*, in Mendocino county, and *Mattole* and *Bear rivers*, in Humboldt county, being the chief ones, none of which are navigable.

Eel River.—The source of this river is in the Coast Range, in the centre of Mendocino county, more than one hundred and twenty miles from where it reaches the Pacific ocean. Hundreds of streams pour down the gulches and through the forests to join it on its course, making Mendocino and Humboldt counties through which they flow the best-watered sections of the State. The course of the Eel river is directly northwest, following the course of the coast, about twenty-five miles from the ocean, until it empties into the Pacific five miles south of Humboldt bay, in Humboldt county. From this point north for twenty miles, to the northern boundary of Humboldt county, there are six rivers, all small; the two principal ones, *Elk* and *Jacoby*, empty into Humboldt bay in Humboldt county.

Mad River.—Five miles north of Humboldt bay, and at the northern boundary of Humboldt county, is the outlet of Mad river, which has its source in the southern corner of Trinity county, from whence, through the lower part of this county and the northern half of Humboldt county, it courses in a northwesterly direction, and on a parallel with Eel river at a distance of eighteen miles to the northeast. It is fed in its course of almost one hundred miles by numbers of streams shooting forth from the deep forests and cañons of Humboldt county, until it pours its volume into the Pacific ocean five miles north of Humboldt bay.

Little River.—Eight miles north of Mad river, and in the southern part of Klamath county, is this stream, running due west from the Coast Range to the Pacific; it is about fifteen miles from its source to its mouth.

Redwood Creek.—Twenty miles farther north, in Klamath county, is Redwood creek, having its source in the northern part of Humboldt county, and running northwest a distance of forty miles; passing through the forests and cañons of the western side of Klamath county, it empties into the Pacific ocean eighteen miles south of Klamath river, at a point called Gold Bluff.

Klamath River.—This river has its source in the northern portion of California among the Sierras and lakes, directly on the Oregon and California State line, many of its branches pushing far into the southern part of Oregon. It crosses the Oregon line and enters California in a well-defined stream in Siskiyou county, one hundred miles due east from the northern State line, on the Pacific ocean. From this point it courses in a rapid and dashing volume through the northern end of Siskiyou county, crosses the southern corner of Del Norte county, down to the lower part of Klamath county, a distance of one hundred and twenty miles: in this course it has gathered great volume and force from the numerous tributaries of the dense forest and mountains of this section of country. Twelve miles from the southern line of Klamath county, it turns suddenly from its course of southeast to northwest, crosses again in an opposite course the northern line of Klamath county, eighteen miles from the ocean, enters the southern line of Del Norte county, which it follows, still in its northwesterly direction, for eighteen miles, when it empties into the Pacific. From the ocean, for forty miles, it is navigable for steamers of light draught. At this point is the mouth of the

TRINITY RIVER.—Having its source in the northeastern corner of Trinity county, it winds its serpentine course through its rocky and precipitous channels through half the length of that county, in a southwesterly direction; then, suddenly turning northwest, enters the southern portion of Klamath county, where it empties into the Klamath river forty miles from its mouth.

North of Klamath river, and the only one north of that in the State, is

SMITH RIVER.—This river rises in the northern part of Del Norte county, close to the Oregon line. It is joined in its course by innumerable streams from both sides. Its direction is due west for twenty miles from its source, when it turns northwest and empties into the Pacific ocean close to the northern State boundary in latitude forty-two.

Pitt River.—Pitt river has its source in Siskiyou county, in the Warren range of mountains, near Goose lake. Its course is in a southwesterly direction through Siskiyou county, across the northwestern portion of Lassen county, into the northeastern corner of Shasta county, where it merges into the principal branch of the Sacramento river. Its length from its source to this point is about one hundred miles; it passes through a rugged and mountainous country.

Scott and Shasta Rivers.—These two rivers are of considerable volume in the spring time. They run west through the northwestern corner of Shasta county, and empty into the Klamath river. Their length each is about thirty miles.

## BAYS AND HARBORS.

From the southwest line of the State to its northern boundary, a distance of eight hundred miles, there are but three first-class harbors—the Bay of San Francisco and the harbors of San Diego and Humboldt. Besides these there are fifteen bays and harbors, chiefly open roadsteads or inlets: none of these are sufficiently secure in all kinds of weather, or of sufficient depth, to afford protection or render them attractive as places of resort for shipping. Aside from these bays there are almost innumerable rivers and indentations in the coast where small craft can seek shelter in cases of emergency, and to and from which an active coast-trade is carried on by small steamers and sailing craft.

The bays and harbors of the coast are here described, commencing at San Diego, and following the line of the coast north to the northern boundary of the State.

San Diego Harbor.—This is the most southerly harbor on the coast of California. It is twelve miles north of the line between California and Mexico, in San Diego county, and about four hundred and forty-six miles south of San Francisco. A broad channel of thirty feet depth of water leads into this fine harbor, which is completely landlocked, with good anchorage, and a length of twelve miles and from two to three miles in width. Large steamers ply between San Francisco and this port, which is fast becoming of commercial importance. The town of San Diego is situated on the northern end of the bay. The next harbor northward is

San Pedro Bay.—This bay is situated near the centre of Los Angeles county, on the coast, three hundred and seventy-five miles south of San Francisco. This harbor is exposed to the south winds, which render it very unsafe in winter. The water for two miles from shore is shallow, lighters having to be used to discharge cargo. An inlet from this bay, with Deadman's island near its mouth, forms the entrance to Wilmington, a thriving town. The town of Los Angeles is directly east from this point, about twenty miles inland, and is connected with it by a railroad. Anaheim Landing is formed by an inlet from this bay, which is only an open roadstead formed by a projecting cape. Northward, for the entire length of Santa Barbara county, there is not a single bay of any importance, although there are several inlets suited to coasting vessels.

San Louis Bay.—This bay is on an open roadstead, in the southern end of San Louis Obispo county, formed by Point San Louis, extending out about five miles. There is good anchorage, but the harbor, if it can be so called, is sheltered only from north winds. It is about two hundred miles south of San Francisco.

Estero Bay.—Sixteen miles north of San Louis bay is Estero bay. The main bay is an open roadstead; but Moro Rock, running out for about four miles, forms a bay of three miles in length, secure from all winds except the westerly. It is in about the centre of the coast line of San Louis Obispo county; it affords good shelter, and has sufficient depth of water.

Carmelo Bay.—This little bay is directly south of Cypress Point, the most prominent headland of Monterey county, and about four miles south of the town and harbor of Monterey. It is about three miles in length and two in width; has deep water, but is exposed to the south and west winds. The ruins of the old mission of San Carlos are here. The bay possesses much natural beauty, but is of little commercial importance. Four miles north of this is

Monterey Bay.—It is formed by an oblong indentation in the coast in the north end of Monterey county, and the southern end of Santa Cruz county. It is ninety miles south of San Francisco. The bay is twenty-five miles wide, and twelve miles in a line from the outer points of Cypress on the south and Santa Cruz on the north. At its southern limit is the town and landing of Monterey, close to which, on Point Pinos, is a *light house.* The Salinas river empties into the centre of this bay, at the western extremity of which is situated the town. The towns of Santa Cruz and Monterey are twenty-five miles apart across the bay, which is open to the south and west, but has a sufficient depth of water; large steamers and sailing craft enter this bay. There is a brisk trade between San Francisco and this place.

BAY OF SANTA CRUZ.—It is situated in the southern end of Santa Cruz county, and the northern part of Monterey bay, of which it is almost a part. It is but an open roadstead, exposed to the south and west winds, and on that account is not safe at all times. The bay is small, but has very deep water; and is of considerable commercial importance, in consequence of extensive lime-kilns, powder and paper mills, and tanneries; besides being the outlet of a rich agricultural section of country. Steamers and sailing vessels ply regularly between this port and San Francisco, from which it is distant eighty miles south. The thriving town of Santa Cruz is situated at its head. The next harbor northward is in San Mateo county.

HALF-MOON BAY.—It is a small indentation in the coast, protected from the north winds by a projecting point, but exposed to the south and west. As a harbor it is of little importance. Small steamers and sailing vessels of light draught run between this point and San Francisco, which is forty-six miles north. It is surrounded by a rich agricultural valley and rolling hills. Spanish Town, a small village, is inland about two miles from the bay. Following the coast line north the next harbor is the

BAY OF SAN FRANCISCO—Which has its outlet through the *Golden Gate*, and which, for size, depth, ease of entrance, and security, is unsurpassed in the world, excepting by *Puget sound* in Washington Territory. The Golden Gate, or entrance to the Bay of San Francisco, is situated in latitude 37° 48′ north, and longitude 122° 30′ west from Greenwich. The discovery of this bay will be found treated of in another chapter. The entrance to the bay is through a passage running due east for a distance of five miles in length, and is about two miles wide; this passage and the bay inside are of great depth and of easy access, there being thirty feet of water at low tide. On the northern side of the entrance rise almost perpendicular, dark, and frowning rocks, to a height of three thousand feet, where, at Point Bonita, is a *light-house*. On the southern side, at the entrance, is built, in the solid rock, at Fort Point, a strong fortification, completely guarding the entrance. From this point to San Francisco is a range of rolling and grassy hills, a great part of the small valleys being covered with mountains of white and drifting sands.

Six miles from the entrance of the Golden Gate is the city of San Francisco. Here the bay turns southward in the direction of San José for thirty miles, forming a peninsula between it and the Pacific ocean, upon which is the city and county of San Francisco. The bay at its widest point between San Francisco and San José is twelve miles; at Oakland, directly east of San Francisco on the opposite side of the bay, it is eight miles in width. Coursing west from San Francisco the bay extends north until it meets San Pablo bay, forming a continuous sheet of water west of San Francisco of thirty miles in length and twelve miles at its widest point; thus making this landlocked ocean sixty miles running north and south and about nine miles in width.

At the northeastern portion of San Francisco bay are *Mare straits.* Here is situated the town of Vallejo, on the west side of Solano county. Directly opposite Vallejo is the United States navy-yard on Mare island. At these places there are deep water and safe anchorage. Passing through the *Straits of Carquines*, a narrow passage of eight miles, in an easterly direction, is met *Suisun bay*, extending ten miles in length. Here the Sacramento and San Joaquin rivers empty their great volumes received from the vast interior of the State through a thousand tributary streams, all finding their way through the Golden Gate.

On the north of San Pablo bay, and east from San Francisco thirty miles, are the counties of Napa and Sonoma; and on the west side the county of Marin, being the northern peninsula which, at the entrance of the Bay of San Francisco, forms its northern rock-bound wall; in this county, on the bay, twelve miles from San Francisco, is the State prison at San Quentin.

There are several islands in the Bay of San Francisco. *Alcatraz island*, six miles from the entrance—the Golden Gate—is in the centre of the channel: a solid rock of sixteen hundred feet in length and four hundred and fifty feet in width, and about one hundred and thirty-five feet above the level of the sea. It is a strong fortress, bristling with heavy artillery from granite walls; and, in conjunction with the heavy armament at Fort Point, and Black Point between Fort Point and San Francisco, is a complete harbor-defence.

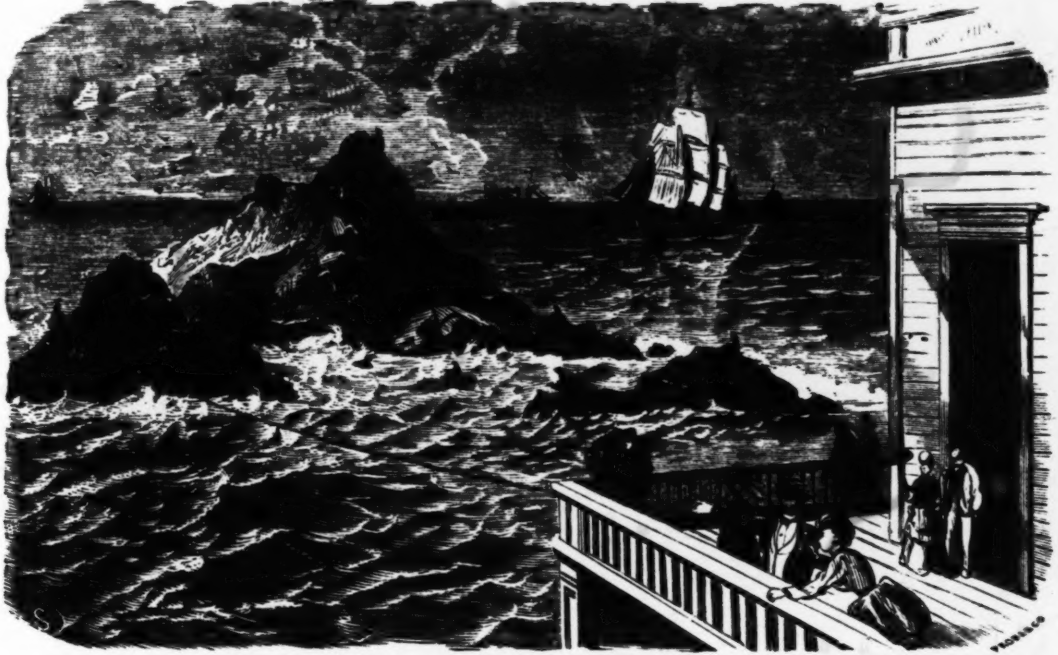
*Angel island*, close to Marin county, directly north of Alcatraz and four miles from San Francisco, contains about eight hundred acres, chiefly good land; strong fortifications have been built here recently.

Directly in the line between San Francisco and Oakland, midway in the bay, is *Yerba Buena*, or *Goat island.* It is less in size than Angel island, and is held by the United States as a military station, although no troops have ever been stationed there. A bridge of considerable length extends from Oakland toward this island, this bridge being the terminus of the overland railroad.

Four miles north of Angel island is *Red Rock.* Further north, in San Francisco bay, is *Bird Rock* and the *Two Sisters.* There are other small islands and rocks in the bay, but not of sufficient importance to mention.

About a mile south of the Golden Gate is *Seal Rock*, a clump of jagged rocks standing high above the sea, worn and scarred by the incessant dashing of the waves, which in stormy weather break over them with terrible fury; the roar of the waters can often be heard at San Francisco, a distance of eight miles. These rocks in calm weather are a source of great interest owing to the immense seals, frequently called sea-lions, which continually crawl up their rugged sides and bask upon them, keeping up a constant howl, much to the amusement and wonderment of the visitors at the *Cliff House*, who, upon the balcony, level their glasses upon them. Some of these animals are as large as an ox. They are protected by law from the sportsman's slaughter.

The name *Golden Gate* is applied to the entrance of the Bay of San Francisco. Many attempts have been made to ascertain the origin of this name and its application to this passage, but all without satisfactory results. few writers going beyond the year 1847, when



SEAL ROCK, HOME OF THE GREAT SEA-LIONS; AND THE "CLIFF HOUSE."
(A little south of the Golden Gate, San Francisco.)

the name appears in the "*Geographical Memoir of California,*" written by John C. Fremont, who had explored the country.

In "*The Book of Constant Purity,*" ascribed to Lau-ki-un, a Chinese philosopher, who is supposed to have lived more than fourteen centuries before Christ, the words golden gate are first found in the records of the human family, and indeed nowhere else, except in modern writings pertaining to the harbor of San Francisco, is the name found. A Chinese sage, speaking of "*The Book of Constant Purity,*" says: "Scholars of the first rank, if they understand it, will be raised to become heavenly rulers. Those of the second rank, if they attend to its instructions, will be placed among the immortal sages of the southern palace. Those of the lowest class, if they obtain this book, will enjoy long life on earth, roam at will through the three worlds, and enter the Golden Gate." Whether or no this prophetic allusion applies to the *hundred thousand*, of the "lower class," of Chinese who have, since the discovery of the precious metals in California, *entered* the Golden Gate is left to the judgment of the reader.

The great temple of Solomon, which was begun 1012 B. C., was ornamented with the precious metals, and this with other edifices and palaces erected by this proud king are said to have had "gates of gold."

Whatever the origin of the name, Golden Gate, as applied to the entrance to the Bay of San Francisco, although applied long before the discovery of gold in California, is certainly most appropriate, for through this gate has passed more gold than through any other port in the world.

The early navigator or explorer, after the perils of a tedious sea-voyage or the trials of the arid plains and the frosts of the stern Sierras, when first beholding the beautiful Bay of San Francisco, burnished like molten gold with the bright sun of a California sky, might well exclaim, *Chrysorrhoas!* (Golden Stream,) the name applied to a beautiful river in Syria near Damascus; or the name might have been suggested to some navigator by *Chrysoceras,* (Horn of Gold,) a name applied to the harbor of Byzantium.

BOLINAS BAY.—Ten miles north of the Bay of San Francisco is Bolinas bay, formed by a projecting point of rocks, on the west side of Marin county. It is sheltered only from the north and west, and is of little importance except for small coast-traders.

DRAKE'S BAY.—This famous historic bay is the place visited by Sir Francis Drake in 1579, and which some supposed was the Bay of San Francisco. It is directly south of the long projecting Point Reyes, in Marin county, and thirty miles north of the Golden Gate; is of considerable size, and well sheltered from the west and north, but is of little value as a commercial port.

TOMALES BAY.—Eighteen miles north of Drake's bay, and forty-eight miles north of the Golden Gate, in Marin county, near the northern end of the county, is this bay. It is less than a mile in width, having eleven feet of water at low tide; it is fifteen miles in length, heading southeast and parallel with the Coast Range. It is sheltered from all winds and perfectly landlocked. The surrounding country is a rich agricultural and grazing district, and a lively coast-trade is carried on between this point and San Francisco

BODEGO BAY.—Six miles directly north of Tomales bay, and where the southern corner of Sonoma county reaches the Pacific ocean, is this little bay, formed by a projecting point. It is well sheltered from the north and west, but is open to the southwest. It is only about two miles in length and one and a-half in width, with nine feet of water at low tide. A small Russian settlement was established here in 1812, which was not abandoned until 1841. An active coasting and produce trade is carried on from this port to San Francisco. From this point north and along the coast for one hundred and seventy miles there is not a single harbor or safe entrance for a vessel of large size. This space embraces the northern half of Sonoma county, all of Mendocino and the greater part of Humboldt county. In this space there are numerous rivers and small inlets, to and from which an active lumber and produce trade is carried on with San Francisco.

HUMBOLDT BAY.—North of the Golden Gate two hundred and twenty-three miles, and in the northern part of Humboldt county, is Humboldt bay, entering the coast where the dense forests of firs and pines grow to the water's edge. The passage in is about a quarter of a mile wide and about half a mile long, having eighteen feet of water at low tide; inside, the bay swells north and south for six miles in each direction, leaving a narrow peninsula between it and the ocean. The bay inside is twelve miles from north to south, and about four in width; it is completely landlocked, and is one of the most secure harbors in the State. Steamers and ships of all classes enter this bay, many of the latter loading lumber and spars for foreign and domestic ports. The town of Eureka is situated on the inside of the bay. On the northern side of the entrance there is a good light-house; there are also substantial tug-boats on the bay. This harbor was not discovered until 1850.

TRINIDAD BAY.—Twenty miles north of Humboldt, and in the southern end of Klamath county, is Trinidad bay. It is an open roadstead, formed by a projecting cape toward the west; it is exposed to the south and west winds, and on that account is not a safe harbor. It is small, but has good anchorage and plenty of water. The town of Trinidad is located at its head, is in the midst of a timbered district, and an active trade is carried on in timber from this port. It is two hundred and forty-three miles north from San Francisco.

CRESCENT CITY HARBOR.—This is the farthest harbor north upon the coast of California, forty-seven miles north of Trinidad and two hundred and ninety north of San Francisco. It is an open roadstead, formed by the projecting Cape of St. George, extending westward about a mile. It is in about the centre of Del Norte county, and seventeen miles south of the northern State line. One mile from shore the depth of water is only twelve feet; vessels of any considerable size must discharge by lighters, but for vessels of light draught there is good wharf accommodation, and a considerable coast-trade is carried on between this point and San Francisco by steamer and sailing craft. Immense quantities of fir, pine, and redwood lumber leave this port. It is also the most northern point of egress and ingress to and from the mines in this section of the State and in southern Oregon. Crescent City is located upon its northern beach.

Pelican Bay.—A sort of bend in the coast forms this bay; it is directly north of Crescent City, in the forty-second parallel of north latitude, the boundary between California and Oregon passing directly through its centre. A lagoon, six miles in length, and Smith river empty into it in the northern corner of Del Norte county. The Coquette river in Oregon, just north of the State line, also empties into this bay, which is an open roadstead, and not sheltered except by the coast on the east: it has no advantages as a harbor.

## CHAPTER XVII.

Islands off the coast—Farallones—Islands in bays and rivers—First mint in California—Indian tribes—Shell money—Springs—Petroleum—Mud springs—Calistoga springs—Sulphur springs—Soda springs—Tar springs—Asphaltum—Geysers.

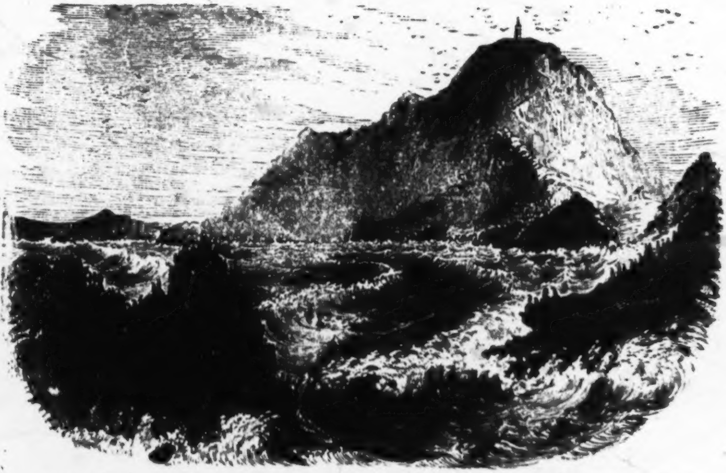
### ISLANDS.

THE islands of the coast line of California are few, considering the great distance from San Diego to Humboldt. In the entire length of the State there are but seven islands of any importance, and these are at its southern end, the farthest north being off the county of Santa Barbara in latitude thirty-four degrees, and all within a coast line of seventy miles, leaving eight degrees of latitude, or more than five hundred and fifty miles of coast, from Santa Barbara to the Oregon line, without a single island except the Farallones, a clump of rugged rocks off the Golden Gate.

Besides the islands off the coast there are several inside the Golden Gate; these are described in the chapter treating upon the Bay of San Francisco.

The islands of the coast will here be described in their order, commencing with the most southerly and continuing northward.

SAN CLEMENT ISLAND.—This is the most southerly island of the coast. It is directly in the thirty-third degree of north latitude, and is forty-three miles distant from the coast of Los Angeles county; is twenty miles in length and five in width. There is but little good agricultural or grazing land upon this island; its general



THE SOUTH FARALLONE ISLAND, FROM THE BIG ROOKERY, LOOKING SOUTH.
(Six barren rock islands. Twenty-five miles due west of the Golden Gate in the Pacific Ocean.

SEA LIONS AND THEIR YOUNG, VICINITY OF THE GOLDEN GATE, CALIFORNIA
(These Sea Lions weigh from 2,000 to 5,000 pounds each.)

character is barren and rocky; and some of the peaks are over one hundred feet in height.

Santa Catalina Island.—This island lies directly midway between San Clement island and the county of Los Angeles, about twenty miles from the coast, and is about the same size as San Clement; it is twenty miles in length and five in width. There is considerable good land and some cultivation on the island, which has been a grazing field for thousands of sheep. Some of the mountains on this island rise three thousand feet above the sea. There are two good harbors, Union and Catalina; and an abundance of good water on the island. Both this and San Clement island were, by act of the California Legislature of April 25, 1851, attached to the county of Los Angeles: they are south of San Francisco about four hundred miles.

North of these islands and off the coast of Santa Barbara county are the five other islands forming the coast islands: the most southerly of these is

Santa Barbara Island.—This island is thirty-six miles south of Santa Barbara county, is about two and a-half miles in length, about two miles in width, and about five hundred feet in height, rocky and irregular, and is the abode of innumerable sea-lions and wild birds. It is thirty-six miles from the mainland. There is but little good land on it.

San Nicolas Island.—This island is twenty-six miles northwest of Santa Barbara island and sixty miles from the mainland of Santa Barbara county; it is twelve miles in length and five miles wide. A great portion of its surface is rocky, but there are some valleys, and large numbers of sheep pasture among them. Its greatest surface is about six hundred feet above the sea. It is about three hundred and forty miles from San Francisco.

Santa Cruz Island.—Inside of San Nicolas, almost in a direct line east forty-two miles, twenty-five miles from the mainland and directly opposite the town of Santa Barbara in Santa Barbara county, is the island of Santa Cruz; it is twenty-four miles in length and seven miles in width. Its surface is rugged, but it has a great portion of good pasturage, upon which more than thirty thousand sheep graze. Wild hogs and goats abound in the mountains; so numerous are the former that they destroy the sheep by devouring the young lambs, and although efforts have been made to exterminate these hogs, it has been impossible, as they secure themselves in the dense jungles in the hills. These hogs first came from the Sandwich islands: they never grow large, and are somewhat like the North Carolina pinewoods hogs; are long legged and long bristled, have great heads and tusks, run like race-horses, and generally die if fed upon corn and potatoes. There is now a war of extermination waging between the sheep and hogs: the sheep by destroying the grass, and the hogs by rooting up the pasturage and devouring the lambs: the hogs have the sheep at a great disadvantage. There is good water on the island, and a safe harbor on the land side. It is two hundred and eighty miles south of San Francisco.

Santa Rosa Island.—Five miles directly west of Santa Cruz island, and thirty miles from the mainland of Santa Barbara county, is Santa Rosa island, sixteen miles in length, and twelve in width at its widest point. The sides of this island are about two hundred feet in height, with but few safe places for landing. The surface above this is almost level and produces abundant grass, upon which thousands of sheep pasture. A few Mexican families reside on the island.

The first mint in California was established on this island, how long ago is uncertain—perhaps centuries before Julius Cæsar invaded Britain. From it was issued the *panga* or shell money of the Indians, which supplied the coast and interior tribes as far east as the Tulare and Owens lakes with the current funds of the aborigines. Once a year bands of Indians from the interior would visit the sea-coast at Santa Barbara county and the island of Santa Rosa, to trade with the island or coast tribes. Those of the interior brought panoche, (a thick sugar made from honey-dew and a species of wild cane,) nut pipes, and wild tobacco. This money was made from mussel shells found on the coast and the adjacent islands; the pieces had holes in them, and were strung on fibres of wild hemp; eight strings were of the value of a silver dollar; and as this money brought the tribes into commercial intercourse, the priests encouraged it. As late as the year 1833, the Indians preferred this money to gold or silver. Not a trace of these once powerful coast-tribes, their canoes, or money remains at this date. Santa Rosa is two hundred and seventy-three miles south of San Francisco.

SAN MIGUEL ISLAND.—Six miles west of Santa Rosa island, twenty-eight miles from the coast of Santa Barbara county, and two hundred and sixty-five miles south of San Francisco, is the island of San Miguel; it is nine miles in length and four in width; is generally rocky, but a large number of sheep pasture upon it; there is a harbor on the east side. The thirty-fourth parallel of north latitude runs directly through the three islands of Santa Cruz, Santa Rosa, and San Miguel.

By act of the California Legislature, of April 25, 1851, the five islands, Santa Barbara, San Nicolas, Santa Cruz, Santa Rosa, and San Miguel, were attached to the county of Santa Barbara. Most of these islands are visited by steamers from San Francisco. Following the coast northward for four hundred and fifty miles, to the Oregon State line, not an island is met with in the whole course except the clump of rocks off the Golden Gate known as the Farallones.

FARALLONES GROUP.—Twenty-five miles due west from the Golden Gate is this group of six small islands, of rugged and barren rock, without soil, grass, or herb. The most southerly of the group contains about two acres, and is the largest of them all; a spring of good water issues from the rocks, and a light-house is erected upon the principal island. This clump of barren rocks is in the possession of countless numbers of sea-lions and wild birds, the eggs of the latter having been for many years a source of considerable revenue to the companies engaged in gathering them.

By act of the Legislature of California, of the 19th of April, 1856, the Farallones, Alcatraz, and Yerba Buena or Goat island were attached to the city and county of San Francisco. For description of these last-mentioned islands see Bay of San Francisco.

## SPRINGS.

California is prolific in natural wonders: not only are her animals, forests, and vegetation astonishing to mankind—the Sierras and their lateral ridges in producing gold and silver—her mountains in elevating their pinnacles—her streams in pouring their dashing cataracts thousands of feet below—her myriads of singing crystal springs leaping from their mountain imprisonments to join the hurrying waters of the Sacramento and San Joaquin to the bosom of the Pacific—but the bowels of the earth, as if uneasy from the effects of a prolonged emetic, belch from its angry mouth volcanic jets of mud, steam, sulphur, and bitter, mineral, hot, and cold water.

From the centre of Mono lake (see Lakes) jets of steam and smoke are emitted in fitful flashes. Four hundred miles north of this point, and near the Mattole river, in Humboldt county, are numerous springs, not of water but of gas: some of them burst forth in jets of great force, and, when ignited, blaze, and hiss their forked tongues from the earth until the elements are quenched. From the head of a stream of water one of these jets sends forth its volume, which, when ignited, presents the singular appearance of the river being on fire. Small springs of petroleum are also found in this region.

In San Diego county, near its centre, eighty miles east of the town of San Diego and fifty miles west from the Colorado river, is the bed of a lake of considerable size: it is about six feet below the level of the ocean. Five miles south of this, in an alkali flat, is a cauldron of boiling mud, tossing and shaking its angry sides and surface, and emitting volumes of steam and sulphurous vapors, throwing with loud reports jets of mud high in the air. For many miles around this cauldron are hot springs and deposits of sulphur; a trembling motion is felt under foot for a great distance, and at times a rumbling, subterraneous noise is heard in the vicinity. There are also sulphur springs near this locality.

In Alameda county, thirty-three miles in a direct line southeast from San Francisco, are warm and mineral springs possessing great medicinal qualities. They are the resort of pleasure-seekers and invalids during the summer season; the climate is genial and salubrious.

CALISTOGA SPRINGS.—The springs at Calistoga, in Napa county, are seventy-six miles north from San Francisco. They are situated in a beautiful and fertile valley dotted with live oaks, and surrounded by rolling hills and mountains partly covered with trees. The view is very picturesque, and good hotel accommodations make it a fashionable place of resort during the summer months.

The springs, which boil from a low, boggy spot in the valley, form quite a group. Some of them are walled with boards and arranged for bathing; some of them are also very hot, so much so that at a little depth eggs can be boiled in a few minutes. Although these springs are twenty-five miles distant from the Geysers, in Sonoma county, they are supposed to be connected with them by some subterranean passage. Experiments made by boring to a depth of sixty feet proved the water to be so hot that no test of its actual heat could be made.

WHITE SULPHUR SPRINGS.—A group of springs called the White Sulphur springs is also in Napa county, about seventeen miles north of Napa City. Sulphur water issues from the rocks in a narrow gorge in the mountains, through which a crystal stream dashes, singing in its course beneath the deep and beautiful foliage of oaks, alder, and willows which fringe the margin of the stream. Rich foliage shades the springs and crowns the mountains.

These springs and their surrounding scenery are most delightful. A comfortable hotel and cottages are maintained here for the accommodation of guests.

SODA SPRINGS.—On the east side of Napa valley, and five miles north of the town of Napa, are situated the famous Soda springs. They are located on the side of a mountain, about one thousand feet above the level of the sea. These springs, which are very numerous, occupy about thirty-five acres of land. From these springs a very superior article of soda is obtained, which has become a staple beverage throughout the State: during the summer more than five thousand dozen bottles per month are sold. The water is pleasant to the taste, and by many is considered to possess great medicinal qualities: it contains bicarbonate of soda, carbonate of magnesia, carbonate of lime, chloride of sodium, subcarbonate of iron, sulphate of soda, siliceous acid, and alumina.

Asphaltum and petroleum are found in several portions of the State. Asphaltum—a thick, tarry substance—and petroleum issue from the surface of the earth. Seven miles west of Los Angeles more than twenty acres are covered with holes: from these bubbles up thick petroleum, which, when cool, forms asphaltum.

In a deep cañon, twenty miles east of Los Angeles, asphaltum issues from a mountain side, depositing large quantities in the gorge below. On the coast of Santa Barbara county, near Mount Hoar, asphaltum forms a thick coat upon the sea-shore, and in places runs far into the sea, following the beach from the slate rock from which it oozes. From these deposits as well as from those in Los Angeles county large quantities of asphaltum are shipped to San Francisco, where it is extensively used for roofing purposes; and, when mixed with gravel and sand, it forms the elegant sidewalks of San Francisco.

Tar Springs.—Six miles west of Buena Vista lake, in the western part of Kern county and near the eastern line of Santa Barbara county, is a boiling spring of thick tar, and another of petroleum—the former covering about an acre. From the centre of this spring or lake constant jets of steam and gas escape; as the fluid around the edges of the spring cools, it forms a solid asphaltum: birds, beasts, and reptiles, unconscious of danger, often rest upon this liquid matter around the edges, only to find themselves imbedded in the congealed and gluey mass in the embrace of death: their bones are found in great quantities in this congealed matter.

In the southern and eastern portion of Kern county large tracts of alkali desert and salt marsh is found, with salt and hot springs. In the eastern part of this county, in a small valley, surrounded by high mountains, is a small salt lake, the water of which is very pure and very salt. The great evaporation caused by the rays of the sun pouring down in this little valley produces great quantities of the best quality of salt. All the salt supply for this section of country is obtained in this lake. Salt and sulphur are also obtained at many points along the coast in the lower portion of the State; and in Alameda county, across the bay from San Francisco, large quantities of salt are produced annually, by flooding the marsh lands with the water of the bay and damming it in, until, under the powerful rays of the sun, it is absorbed, leaving its crystals of salt on the bottom, from which they are gathered and sent to market.

GEYSERS.—One hundred miles north of San Francisco and twenty-five in a direct line north of Santa Rosa, in the northeast corner of Sonoma county, is one of the greatest natural curiosities in the State, if not in the world. In a deep cañon, surrounded by sharp and abrupt peaks of the Coast Range, is the scene of the mysterious laboratory of nature known as the *Geysers* and hot springs. The springs, which are very numerous, are in Pluton cañon, and cover a space of about two hundred acres; they are about eighteen hundred feet above the level of the sea, with mountains on all sides from three thousand to four thousand feet in height; there are more than three hundred springs, steam-holes, and gas-jets in the group. On the side-hills in the vicinity oak and fir trees rear their heads above the smoke and steam of the cauldron below; and the scenery in the vicinity is picturesque and romantic. There is abundance of trout in the adjacent streams, and of bear, deer, and quail in the hills. There is good hotel accommodation, and were it not that during the summer months it is so warm, the Geyser springs would be a most agreeable summer resort for tourists.

The springs are of various sizes and degrees of heat; some so hot that an egg can be boiled in three minutes. The fluids emitted from these springs are of every color and shade: one, the "Devil's Ink Bottle," sends forth a good quality of black ink. Mingled with the fluids, impregnating the air, and crusting the surface in this vicinity, are alum, ammonia, sulphuric acid, nitric acid, sulphur, epsom salts, magnesia, and soda.

A short distance from this is the "Witch's Cauldron," about seven feet in diameter, boiling and hissing, as its sable hell-broth lashes for three or four feet above the lips of the cauldron. The depth of this infernal pit is unknown.

Some yards from the cauldron are "Steamboat springs," where, in apertures in the side of the rocks, in dense volumes, great jets of steam shoot forth with a roaring, thundering noise, like the escaping steam from a steamboat. Strange to say, that, in the edges of the steam and hot springs, where the heat is two hundred degrees, grass, flowers, and herbs grow: they are, however, peculiar to this place, and seem to flourish in water and steam that would destroy life in any other vegetable growth.

In the vicinity of this laboratory of nature wagon-loads of alum, sulphates of iron, sulphur, and epsom salts can be gathered. The strange and fearful commotions in this locality, whether caused by chemical forces or from some unquenched furnace still devouring the rocks below, is well calculated to impress the beholder with the power of Omnipotence.

Shocks of earthquakes, although irregular and uncertain in their oscillations and appalling in the extreme, soon pass away; but to stand upon the verge of eternity surrounded with volumes of steam and smoke, whose sulphurous odors stifle and blind, and where the quivering lips and gaping jaws coated with rough sulphurous scales sputter in angry moans from infernal depths, while the black, yellow, and green-streaked boiling saliva from these angry mouths, whose fetid breath suffocates and confounds, lashes up its acid fluids, and seeming to invite the beholder into the "Devil's Cauldron," with his sins fresh blown upon him, is not to be trifled with nor easily forgotten.

The famed Geysers of Iceland, Milton's Paradise Lost, and Bunyan's Pilgrim's Progress, warmed up with a doctrinal sermon upon the unquenchable fires of hell, may serve to awaken a lively imagination of the regions where the "worm never dieth;" but, for a genuine realization of the blowpipe of his Satanic majesty, drop the hypochondriac in the midst of these seething scenes—let him cast his eyes upon the mountains of sulphur around—let him look upon the mysterious meanderings of Pluton creek—inhale the gases and fumes emitted from the angry mouths craving for a drop of cold water—look upon the scalding and angry fluids—feel the sides of the crater tremble and swell beneath his feet, as heavy sighs come forth from its fathomless furnace, and its sulphurous crest is shaken in reckless defiance of the tame realities of every-day life—and the scene is complete, and the argument of unquenchable fires conclusive.

# CHAPTER XVIII.

Waterfalls—Yosemite falls—Creeks—Rivers—Mirror lake—Bridal Vail—Earthquakes.

THERE are few countries in the world so well supplied with water as California. She abounds in vast lakes, expansive bays, and swift rivers. The Coast Range of mountains pours innumerable streams of crystal water from its sides, cutting their way through its ridges to the ocean on the west, or coursing down its eastern side to water the fertile valleys below. In this range there are many beautiful cañons, glens, and valleys, through which these streams leap in sparkling cascades, affording tempting and cheap motive power for the wheels of industry, and this power the growing necessities of the times will demand.

Almost two hundred miles to the east of this chain of mountains are the famed Sierras, stretching for four hundred and fifty miles along the eastern line of the State, with their numerous lakes and dashing rills fed by the eternal snows of their mountain tops, and pouring their liquid streams into the parched valleys below. The myriads of bounding streams which course from the western slope of this range have many features of wild beauty and utility. Besides supplying the miner and agriculturist with water, their foaming, leaping tides, pouring through deep chasms thousands of feet below, over the frowning, precipitous walls of rocks, the rugged hill-sides, and through the tall trees, must, like the waters of the Coast Range, at no distant day

NEAR VIEW OF THE YO-SEMITE FALLS.—2,634 FEET IN HEIGHT.
(First Fall 1,600 Feet. Second Fall 600 Feet. Third Fall 434 Feet.)

supply the busy scenes of skilled industry with sufficient motive power. But whether or no the hand of science and industry shall tame the wild current of the Yosemite, its natural beauty must hold supreme sway over all the great wonders of California.

## YOSEMITE FALLS.

One hundred and forty miles due east from San Francisco, and one hundred and eighty-two miles by the nearest line of travel, on the head waters of the Merced river and in the extreme eastern part of Mariposa county, forty-five miles west of the eastern State line, in a gorge of the Sierras, are the famed Yosemite falls and valley, one of the most picturesque spots in the world.

The valley with the surroundings of this scene of marvellous beauty stands about 4,060 feet above the sea, is about eight miles in length and one in width, swelling in the centre to about three miles. It is reached by a descent of over two thousand feet down the rugged sides of the mountains by which it is surrounded. This beautiful valley, through the centre of which meanders in graceful curves a silver stream, upon whose sides is a green carpet of grass bespangled with delicately tinted flowers and studded with stately pines, presents in the deep forest a picture of unsurpassed beauty. The atmosphere, so pure, perfumed, buoyant, and invigorating, with the mellow sunlight flooding down upon this charming spot, makes it most attractive, and induces feelings of serene composure and good will toward men.

Entering the valley at the west by a precipitous descent, the green vale is brought suddenly to a termination by the closing in of the walls of a steep cañon; threading up this valley, frowning walls of granite of from three thousand to four thousand feet completely surround it, until the beholder is standing in the midst of the wildest, most terribly grand, and awe-inspiring natural architectural splendor on the globe. Casting his eyes upward, he beholds the grandest scene of nature, before which the majesty of the pyramids of Egypt, the frigid walls of Iceland's mountains, the glaciers of Lapland, and the stately grandeur of the Andes pale. No scene so grand can be found in the gorges of Switzerland: neither the rugged face of Via Mala, the frowning pass of Tete Noir, nor the precipice over which the Staubbach pours its foam, can present such wild beauty. The cleft walls and lofty turrets of the Himalayas fail to equal the stern, imposing perpendicular walls of smooth granite, rearing their massive, clean sides, for almost a mile, sheer and stern. Nor can the wild roar and dashing tide of the Niagara equal the grand march of the crystal fountains leaping from their granite imprisonment and bounding headlong in reckless glee over and through these precipitous walls for 2,700 feet. Looking heavenward, the beholder views the soft-shaded drab sides of two perpendicular walls, rising almost a mile in height, and so close that, should either fall over, it would tumble against the other. Seeking in vain for the lost mass of rock which once filled the chasm, the conclusion is arrived at that the bottom must have dropped out, and the molten mass in the bowels of the earth received as a sweet morsel the millions of tons of granite once a part of these mountains; and this idea seems to be entertained by the most scientific observers.

Bastions, peaks, and shafts rear their heads in imposing grandeur. El Capitan lifts its sheer sides 3,300 feet above the little valley; cathedral spires push their slender granite shafts high in the air, above which the "Three Brothers" rear their unscarred and solemn walls four thousand feet in perpendicular grandeur above the valley. As the observer looks in reverence upon Jehovah's grandest masonry, the eye is relieved by what appears to be a shrub held in a crevice of the perpendicular wall: it seems to cling nervously to the cold rock, yet shakes its tiny branches in defiance of all below: it is more than twenty-five hundred feet from the green vale below. This tiny shrub proves to be a gigantic forest pine, dwarfed in the distance.

Still other attractions, mighty walls and frowning turrets, strike the beholder: "Sentinel rock," elevated three thousand feet from the valley, and the crowning grandeur of the scene—the "Dome"—whose bastion and perpendicular walls rear in unbroken masses 4,160 feet above its pedestal, fringed with grass and beautiful flowers below.

Contemplating these mighty, stern sentinels of eternity, whose domes may have been reared millions of centuries before the tree from which was plucked the forbidden fruit of Eden sent forth its first leaf—in the midst of these scenes, we sigh for the lost energies of Plato and Kepler, probing the sides and sounding the lungs of mother earth; we bear testimony to the irreparable loss to science that Whitson, Baron Fourier, De Maillet, Leibnitz, Hutton, Werner, Murray, Kirwan, Deluc, Lyell, Buckland, Humboldt, Hugh Miller, and

Agassiz have never gazed upon these monumental piles abounding in rich evidences and stern lessons of geological wonders.

But these gigantic columns and frowning pillars are not the only wonders or beauties of Yosemite. Mingled with these stately domes, and pouring their sparkling gems from their aerial urns, are the most magnificent waterfalls that ever adorned the earth. Standing upon the sward below and looking upward, the scene is grand beyond description: through the narrow walls of the smooth rocks above is heard the thundering march of Yosemite fall, coming with its mighty torrent, thirty feet wide and three feet deep, dashing at a single bound sixteen hundred feet upon a ledge or grand shelf of granite; here, gathering its spent forces, it rallies again, and, leaping from urn to urn, frolics downward for a distance of seven hundred feet, eddying, curving, and sparkling along; here, marshalling all its forces and raising its hoarse chorus in the wild cry of its last effort, it plunges furiously through the chasm four hundred additional feet, coiling itself like a serpent in the basin of the lawn below, through which it sullenly meanders, whispering in subdued tones to the nodding flowers and foliage, which seem to recognize the presence of a dethroned monarch. The fall of this mightiest of cascades, from its uppermost height to its final repose in the valley below, is 2,700 feet; whilst the famed Voringsfos of Norway, a mere thread in volume, is but 950 feet, and the world-famed Niagara, although so vast in volume that it has no rival on the globe, falls but 160 feet, but one-sixteenth of the fall of Yosemite, leaving the California waterfall the greatest in the world.

One of the many charming features of this spot is

SOUTH OF HALF DOME, YOSEMITE VALLEY.
(4,737 feet high above the Valley.)

EL CAPITAN, YOSEMITE VALLEY.
(3,300 feet high above the Valley.)

CATHEDRAL ROCKS, YOSEMITE VALLEY.
(2,660 feet high above the Valley.)

the deep basin known as Mirror lake—a placid fountain formed from the spent diamond drops of the cataract, so transparent that the hanging cliffs, stately pines, and foliage upon its borders are so completely mirrored in its depths that, with their roots seemingly clinging to the surface and tops downward, all the verdure and beauty of the forest and grandeur of the mountains are seen—in *reality* above, in *shadow* below. The photographer's art has beautifully portrayed this scene of substance and shadow in the familiar pictures of "Mirror lake" so common in the picture stores and art galleries of San Francisco.

But all the beauty of Yosemite does not end with these scenes. We must yet dwell upon the most fairy-like pictures of earth: the "Bridal Vail," outrivalling the daintiest gossamer behind which blushing maiden hides her charms, pours its sparkling flood of pearls, dancing, leaping, and sporting in fantastic glee, and bathing the stern and precipitous cliffs in its cooling mists of nine hundred feet descent. This beautiful fall, bursting from the summit, light and gauzy in its volume, spreads its glistening spray in a sheet of thin vapor, which, met by the eddying zephyrs that float about, catch up its fleecy folds, looping, tossing, and whirling them about in spasms of sublime coquetry, ever changing the fascinating scene in the hazy and translucent mists, where the mysterious crimson and gold of the ever-changing rainbows, dancing and floating, blend, dissolve, and disappear like the shadow of a vision. The dallyings and coquetry of these new-born mysteries, as in couplets and triplets they lock arms and seem to waltz into their dissolving eternity, shaking from their azure pinions the silvery mists of the clouds, form the loveliest combination of terrestrial and celestial phenomena ever beheld by man.

The view from the summit of the grand bastions and peaks of this fascinating spot, looking from their aerial heights upon the frolicking torrents, leaping and laughing in their mountain glee, and watching the sudden meanderings in the vale below, where stately pines of two hundred feet look like garden shrubs, is at once grand, picturesque, and romantic, outrivalling any scene of natural beauty yet discovered on the globe, lending new inspiration to the beholder, and opening new fields of meditation for the painter and the poet—a scene where the careworn combatant in the fickle struggle of life can look from *his* heated and disordered plain upon the majesty of Jehovah's mightiest cathedral, whose silver-tongued organs, from creation to eternity, peal forth their choral strains proclaiming the omnipotence of the Creator.

So sacred is the Yosemite valley held by the people of California that, in order to preserve its primitive beauty and spare its forests from invading ax-men, they procured an act of Congress donating this lovely spot to the State, in trust for the people.

## EARTHQUAKES.

Since the days of the first mutterings of Stromboli, (Lipari isles,) whose continuous fires have not been quenched for more than two thousand years, up to the desolating ravages of Vesuvius and Etna, the uplifting of Jorullo, and the angry lips of Cotopaxi spit forth its molten masses of more than one hundred tons a distance of nine miles, the human family have held the strange phenomenon of earthquakes as fearful visitations of God's wrath; but science, which has enabled man to measure the heavenly constellations, harness steam, chain the lightning and encircle the globe in its electric bands, has fully demonstrated the volcanic origin of this element of force and terror. All parts of the globe have been at some time visited by earthquakes and volcanic eruptions; and those portions of the sphere where the interior fires have most to feed upon, and where they reach their fiery tongues nighest the surface, sometimes break forth in volcanic eruptions; or the great furnaces below, receiving of a sudden great floods of water from the fissures of the earth, gorges, and streams of the mountains, or from the ocean itself, generate such immense bodies of steam and gases that these elements, in seeking an escape, rush furiously through the chasms below, causing mother earth to cough, shake her sides, and wriggle her back, much to the terror of her occupants.

Europe, South and Central America, and Mexico have been the theatres of fearful eruptions and shocks of earthquakes. In many parts of the United States shocks of great severity have been felt. Philadelphia and Boston, in the seventeenth century, found their chimney-tops rattling about the heads of their pious Quakers and sedate Puritans.

The severest earthquake ever felt in the United States was at New Madrid, Missouri, which commenced at two o'clock of the morning of December 16, 1811. Twenty-eight shocks occurred on this day, uprooting trees, opening large fissures in the earth, shaking down chimneys, and doing much damage. From this period to the 8th of February following, the earth was constantly agitated. On this day the shocks were most severe: houses were levelled, trees rent in pieces, portions of the land sunk, forming lakes; and a large island in the Mississippi, covered with immense forests, sank beneath the waters, and the course of the Mississippi was turned back for more than an hour; jets of electric fire, mud, and soot issued from the earth, which was in commotion for several months; yet it is not certain that a single life was lost.

There is no account of any earthquake ever having occurred in California of any such violent character, until the Inyo earthquake of 1872: indeed, compared with the earthquakes of other times and countries, California's earthquakes are but gentle oscillations, reminding us of the herculean spasm of nature that jerked the Sierras from the bowels of the earth, and tossed the Himalayas and Andes into the air. Throughout the length of the State, especially within a space of sixty miles of the coast, occasional tremors and light earthquake-shocks are felt; sometimes these shocks are sharp and decisive, but, so far, have not been destructive to any extent. History does not tell us of any earthquakes in California from its earliest settlement up to 1800. In October of this year, some adobe buildings were cracked at the village of San Juan Bautista. This is the first earthquake mentioned in the mission records of the country. The next account is found in the records of the Presidio of San Francisco, showing that twenty-one shocks had occurred from the 21st of June to the 17th of July, 1808. From this period to 1812 there is no mention of earthquakes. In September of that year, a very severe earthquake shook the lower portion of the State with great violence, almost totally destroying the Mission of San Juan Capistrano, in Los Angeles county, and the Mission of Prurissima, in Santa Barbara county; also the church at San Inez. Thirty persons are supposed to have been killed by this shock: this is the first account of loss of life in California by earthquakes. In 1818, a mission church at Santa Clara was thrown down; and at San Francisco, on May 15, 1851, glass windows were broken, goods in the stores misplaced and shaken down, and ships in the bay rocked and tumbled about by a very severe shock. At San José, in November, 1858, a severe shock cracked most of the brick buildings of the town. A portion of Alameda county was severely shaken on July 3, 1861. About noon on Sunday, October 8, 1865, a very severe shock was felt at San Francisco, and many buildings were shaken so as to cause them to be cracked. The vibrations seemed to be from north to south; along the western side of Montgomery street, for several blocks, the glass windows were shivered to atoms, and on the west side of Third street, for two blocks, and in many other parts of the city, the glass was broken and literally ground to powder. Great consternation was caused among the worshippers in the churches, (it being Sunday;) many fainted and were much alarmed.

Since the occupation of the country by the Americans, in 1846, there has not a year passed without one or more shocks being felt in the State; sometimes confined to small sections of the country, at others extending over a vast area. It often occurs that the shocks felt at San Francisco are not felt at Stockton, Sacramento, or Marysville. The severest earthquake since the occupation of the country, up to 1872, was experienced on the 21st of October, 1868, about eight o'clock in the morning. It was felt most severely in the vicinity of San Francisco and in Alameda county, causing considerable damage and much alarm. It commenced by gentle oscillations, increasing in violence, when, with a fearful tremor, it tossed and swayed the buildings until they toppled and almost fell, causing great terror, and filling the streets with the inhabitants, many of whom abandoned their dwellings, sought refuge upon the vacant lots and public parks, where they erected tents, and for several days refused to be comforted or return to their homes. Many brick buildings were cracked, others partly sank, and some in course of erection were thrown down; while not a building in the city which was substantially built or upon good solid foundations, although there were many brick houses of four and five stories in the city, received any damage. Several shaky, rickety walls and hanging cornices of brick and mud (for the mortar used in San Francisco is the poorest in the world) were thrown down or much damaged, and windows were pretty generally broken. Three persons were killed, all by the falling of defective cornices or walls. The court-house at San Leandro, Alameda county, was thrown down, and one man killed. Many other buildings around the Bay of San Francisco were destroyed, and in some sections not a brick chimney could be seen standing. Added to the terror of the people was a dull, sickening sensation, like sea-sickness, causing some great distress. Some persons who had arrived shortly before this from the Atlantic States, and others who had been in California for many years, left the State, intending never to return. It seems singular that these people should leave a country where, for more than half a century, not a half-dozen people have been killed by any natural phenomena, while in the

New England States, Middle States, and in the valley of the Mississippi, hundreds are killed annually by sunstroke, lightning, frost, and hurricanes, which yearly destroy millions of dollars worth of property.

California is entirely exempt from accident by sunstroke, lightning, hurricanes, and frosts. There is scarcely a State in the Union, east of the Rocky mountains, which does not in a single year lose more human lives by some of the above-mentioned phenomena than has been lost by earthquakes in California within the memory of man up to the year 1872.

The severest earthquake ever known in California, far surpassing in violence, duration, and destruction of life any disturbance of this nature west of Mexico, in America, occurred in the southeastern section of the State, in the county of Inyo, on the 26th of March, 1872, completely levelling the houses in the vicinity and causing great panic and loss of life. The location of this eruption is in 37° north latitude and 118° longitude west from Greenwich, one hundred and eighty miles due east from the Bay of Monterey, and two hundred and thirty miles due southeast from the city of San Francisco. Inyo county lies entirely east of the Sierra Nevada mountains. (This county and Mono adjoining on the north are the only counties in the State east of this range.) In the Sierras forming the western line of the county, close to the scene of this commotion, stand the loftiest mountains in the State—Tyndall and Whitney standing respectively fourteen and fifteen thousand feet above the sea. Abundant evidences of former eruptions and the volcanic nature of this section are seen on every side: alkaline deserts, dry lakes, hot and sulphurous springs, and to the south *Death valley* and the mud volcanoes, hot, salt, alkaline, and bitter springs and extinct craters of San Bernardino county, Owens lake, (see Lakes.) The Coso, Inyo, and White mountains, with valuable mines of gold and silver, pass through this county. In the vicinity of the disturbances are rich agricultural valleys and pasture ranges, but, owing to the remoteness of the county from railroads and navigation, but little permanent settlement has yet been made. The entire population of the county is but 1,956, engaged chiefly in quartz-mining, grazing, and agriculture. A large number of the population are native Californians of Mexican extraction, and the villages are built chiefly of *adobe* or sun-dried bricks, as are most of the Spanish and Mexican towns of America. Earthquakes make fearful havoc among such houses, shaking them into heaps of loose sand, while frame or solid brick buildings are little affected, unless by severe shocks.

At two and a-half o'clock on the morning of March 26, the inhabitants of the district were awakened by loud explosions as of heavy artillery, followed in an instant by a terrible upheaval and rocking of the earth from south to north. At the little town of Lone Pine, as if in a twinkling, the whole place (containing about five hundred inhabitants) was destroyed, not a building left standing, and the frenzied inhabitants buried in the ruins—some in death; others rending the night air with their agony and lamentations; parents and children, wives and husbands, separated, some dead, others in intense pain crying to be relieved from their imprisonment in the ruins of their fallen homes; others in the wildest delirium, rocked, pitched, and tossed in the darkness of night among the dead and dying, while the hissing, roaring, and rumbling of volcanic heat and steam below, and tumbling mountain-tops above swaying their heads to and fro, and shaking from their sides vast bodies of rocks, rendered the scene appalling in its intense fury. From two and a-half o'clock, the time of the first shock, until sunrise over three hundred distinct shocks were felt, and more than one thousand distinct shocks within three days, and seven thousand shocks to April 4. The earth during this period was not still a moment, shaking, trembling, and quaking, indicating the immense forces at work below. At Tibbet's ranche, fifteen miles from the town of Independence, about forty acres of ground sunk about seven feet below the surface of the country; Owens lake rose four feet, and Owens and Kern rivers turned back for several miles, and ran over their banks, depositing shoals of fish on the shores; and vast, yawning fissures and chasms opened their jaws, in some instances swallowing the dead and dying, and stretching for miles across the country their sepulchral depths, from which came the sulphurous and fiery breath of the unbridled and unwelcome monster whose voice is the terror of our race.

Lone Pine, which seems to have been the centre point of the shock, had twenty-seven persons killed and a large number wounded; and fifty-two buildings (three-fourths of the whole town) were destroyed. At Corro Gordo, Swansa, and Independence buildings were shaken down and a few persons killed and some wounded. Thirty-four persons in all were killed by the earthquake of Inyo county, and about one hundred wounded. The destitution of the people being relieved by donations from other sections of the State, they buried their dead, rebuilt their homes, entered their mines and fields, and pursue their avocations on the scenes of one of the most appalling natural phenomena ever known in the limits of the republic of America.

The extent of the Lone Pine earthquake was along the whole line of California, being felt in every town from the Oregon line to the Gulf of Mexico, and from the southern slope of the Sierras to the waters of the Pacific, extending seven to eight hundred miles north and south and three hundred miles from east to west.

The Sierra Nevada in the region described breaks down southerly into a number of detached parallel ranges, and in San Bernardino and San Diego counties loses altogether its distinctive character as a great mountain chain. The region abounds with evidences of comparatively recent volcanic action. Alkali lakes, like Owens lake—a body of salt and alkaline water twenty-two miles in length and eight in width—solfataras, hot springs, and mud volcanoes, point unmistakably to the fact that the tremendous forces which once were in active operation all along the Sierra are here still asserting themselves with lessened but still threatening energy. The noted depression of Death's valley, not far southeast from Owens lake, with its area of forty miles in length and ten miles in width, a great portion of which is one hundred and fifty feet below the level of the sea, while the surrounding mountains are not less than five thousand feet above it, is a locality plainly evidencing volcanic action. Still further south, in San Bernardino county, north of the trail leading from Fort Mojave *via* the sink of the Mojave, the Mojave desert and river, to Los Angeles, there are numerous volcanic craters, rising to heights of fifty to two hundred feet above the desolate plain, still as perfect as when their fires went out. A lava flow covers the earth for many miles, stretching like a great frozen river through the desert in this vicinity.

The volcanic belt extends to the borders of the Colorado desert, where hot mineral springs, volcanic ashes in vast beds, lava, pumice-stone, and other evidences of comparatively recent volcanic disturbance, are found in abundance. It is even supposed that the "Dry Lake," or great salt plain of the Colorado desert, was the bed of the sea at no very distant date, and that its present condition is the result of volcanic action, the ancient water-line, still distinctly marked by sedimentary discoloration, extending along the side of the San Gorgonio mountain, south of San Gorgonio pass, for some fifty miles. At Dos Palmas, a water station on the northeastern side of the Colorado desert, on the trail from San Bernardino *via* San Gorgonio pass to Lapaz, on the Colorado river, in May, 1868, a severe earthquake—which was not felt in northern and central California—opened a long fissure in the earth, from which a stream of cold water flowed for some weeks. This fissure is but a short distance from the great hot spring of Dos Palmas, which is still flowing, but is said to have grown very much cooler since that event. At Fort Tejon, in the southeastern part of Kern county, several years ago, the earth was rent into a chasm. In the late convulsion the ground heaved and vibrated, and then, as the awful sound died in its far-off echoes, those who had escaped from their crumbling dwellings aghast and almost speechless with terror hoped the catastrophe was over. But almost instantly, away to the south, down the narrow valley towards Lone Pine, was heard a sharp and thundering explosion as of a thousand columbiads fired at once. The people braced themselves for the shock; nearer and nearer came the appalling noise, and, as the shock advanced, thousands upon thousands of huge rocks tumbled from the crags on either hand and crashed with deafening din into the ravines and upon the edges of the valley below. Then came the noise under their feet, and with it the awful, sickening, and terrifying uplift and swing of the earth. The people ran to and fro; some screamed, some prayed; others stood still and watched the course of things with stoical indifference. They soon learned that but one or two persons had been killed there, and yet none knew what the end might be, for the earth vibrated constantly. At short intervals would be heard away off in the direction of Lone Pine and the lake that terrible boom! bang! as if the very mountains themselves were splitting in twain. Not only did tens of thousands of rocks and boulders, rolling down the mountains, add to the confusion of the scene, but in the Sierras, on one side of the valley, avalanche after avalanche of snow was sent thundering, booming, almost screaming, down from the regions of eternal frost and ice to the gulfs below.

People living near Independence, at points where they could see plainly the sides of the mountains on either hand, at every succeeding shock could plainly see, in a hundred places at once, bursting from the rifted rocks, great sheets of flame, apparently thirty or fifty feet in length, and which would coil and lap about a moment and then disappear. These flames could not have been caused by friction of rocks and boulders coming down the mountains.

When daylight came, the entire valley south of Independence and toward Lone Pine was filled with smoke and dust, and in places, people said, the fumes of sulphur were almost suffocating. The clouds of smoke extended from Fish Springs south, as far as the eye could reach.

Numerous springs were dried up instantly and others broke out in other places, while the flow of water from all was greatly increased. In one little stream, three or four inches deep, the water was thrown upward to the height of two or three feet over foot-bridges; springs of water were forced out of the mountains where before the rocks had been as dry as a powder house. The valley was literally torn in pieces. In every direction there were fissures, which, however, filled in again by the loose soil. Some, however, were long and deep. At one place a large section of the valley had subsided about ten feet, leaving an abrupt, perpendicular bank at the sides. In many places the ground was thrown into ridges and mounds, five or six feet high, and in every direction were signs of the destructive agencies that had been at work, all, however, decreasing in number and extent as they travelled north. Cattle and horses were thrown prostrate during the heavier shocks, and their bellowing and neighing were pitiful to hear. At Fish Springs and other places the atmosphere was strongly impregnated with sulphur. For seventy-five miles north of Independence not an adobe or brick house was left standing. The Indians were terrified and commenced leaving the country, fearing the recurrence of a general convulsion of nature, which, according to their traditions, occurred in that region some hundreds of years ago, and created what is known as Owens River valley, but which was before a chain of mountains.

The great air-valves of Mount Hood, Oregon, the Mauna Loa, Sandwich islands, and Vesuvius, in Italy, simultaneously with the Inyo disturbances, gave forth tokens of activity; and the latter, drawing its fiery breath beneath mountain and sea, acting as a safety-valve to the troubled Sierras, lights with sheeted flame Italian skies, while trembling Naples and Campania, and buried Pompeii and Herculaneum, attest its majestic grandeur and appalling power. Almost simultaneously with the Inyo earthquake, Vesuvius poured forth volumes of smoke, ashes, and fire, and floods of liquid lava poured down its sides and far into the country, destroying life and property, and driving the terrified inhabitants from their homes. At Naples, twelve miles distant, so thick did the ashes fall that the people had to carry umbrellas to shield themselves; and these emissions and fiery terrors continued throughout the greater part of the month of April, 1872.

The Inyo earthquake of 1872, although severe and destructive, is but tame when compared with the convulsions in many parts of Europe. The destruction of Herculaneum and Pompeii, in the year 63, and their final burial by volcanic floods of fire and ashes in the year 79, are among the most striking of recorded natural destructive commotions. In the year 115, while the Emperor Trajan was in the city of Antioch, in Syria, it was almost totally destroyed; again, in 458, it was visited by a severe earthquake; and in 526 occurred the most disastrous earthquake on record: while the Festival of the Ascension swelled the city to overflow came the fearful eruptions, in which two hundred and fifty thousand persons were swallowed up. In centuries past the feverish pulsations of the earth visited almost every portion of the globe, rocking the proud Roman empire as if it were a cockle-shell.

The great earthquake in Chili, in 1822, raised one hundred thousand square miles of country from two to seven feet above its former level. In the year 1692, in the island of Jamaica, the city of Port Royal, the capital, was carried down beneath the surface of the water; more than one thousand acres sunk in one minute, the sea rolling the ships in the harbor over the tops of the houses. On a more gigantic and destructive scale was the one on the island of Java, in 1772, when the lofty volcano Papandayang was in action, and an area, including the mountain, of six miles broad and fifteen miles long sunk, carrying down forty villages and 2,957 inhabitants.

In the great earthquake of Lisbon, of November 1, 1755, a deep, rumbling, hollow sound preceded the terrible shock, which in six minutes destroyed the principal portion of the city, carrying down sixty thousand people. The sea receded, leaving the bar dry, and returning in a great wave fifty feet high, while the adjacent mountains trembled and were flung into the valleys. The frightened inhabitants, who had sought refuge upon the elegant marble quay, just completed at great cost, suddenly found themselves as if upon a foundering ship: quay and all, with the surrounding boats and shipping, all plunged into eternity. Not one of the one-thousand human beings thus engulfed, nor a sign of boat or vessel of the fleets swallowed up, ever reappeared above the surface; but over the spot still stands the waters, six hundred feet deep, leaving no trace of the life, bustle, and wealth of this doomed and desolate region. The shock that thus caused such devastation shook an area four times as great as all of Europe. It was felt at once in the Alps and along the coast of Sweden. The thermal springs of Töplitz, Germany, for a time disappeared. Loch Lomond and other lakes in Scotland rose and fell by the agitation. Along the shores of Barbadoes, Antigua, and Martinique the tide rose suddenly more than twenty feet, and the sea was of inky blackness. The waters of Lake Ontario were agitated; and on the shores of Massachusetts the sea roared and was fearfully agitated, water-spouts burst forth, and springs which still run were opened. Chimneys in Boston were thrown down, and houses disjointed and cracked.

Naples, in December, 1857, was threatened with total destruction by violent shakes; while Mount Vesuvius continued to emit clouds of smoke accompanied with loud reports like the roar of cannon. At this time the destruction in the surrounding provinces was terrible. Potenza, the capital of Basilicata, was left without a single house inhabited. Marsico Nuovo, Tito, Laurenzana, Polla, and other places were reduced to ruins: from twenty-five to forty thousand lives were lost, it is estimated.

On the 19th of June, 1858, an earthquake of great severity visited Mexico, destroying many houses in the capital and the aqueduct supplying the city with water, and levelling churches and buildings throughout many parts of the country. On the 22d of March, 1859, the city of Quito, in Ecuador, was almost entirely destroyed by an earthquake; several thousand persons perished.

Throughout the greater part of Africa and in the region of Greenland no record is made of any earthquakes having occurred. In the Atlantic ocean, midway between Guinea and Brazil, near the equator, eruptions are almost constantly occurring, passing ships experiencing their effects and also observing the variations in soundings and the great irregularity of the bottom of the sea. That this is the seat of active volcanoes cannot be doubted.

# CHAPTER XIX.

Zoölogy—Relics of antiquity—Animals—Birds—Fishes—Bull and bear fights—Reptiles—Bees—Horned toad—Whales.

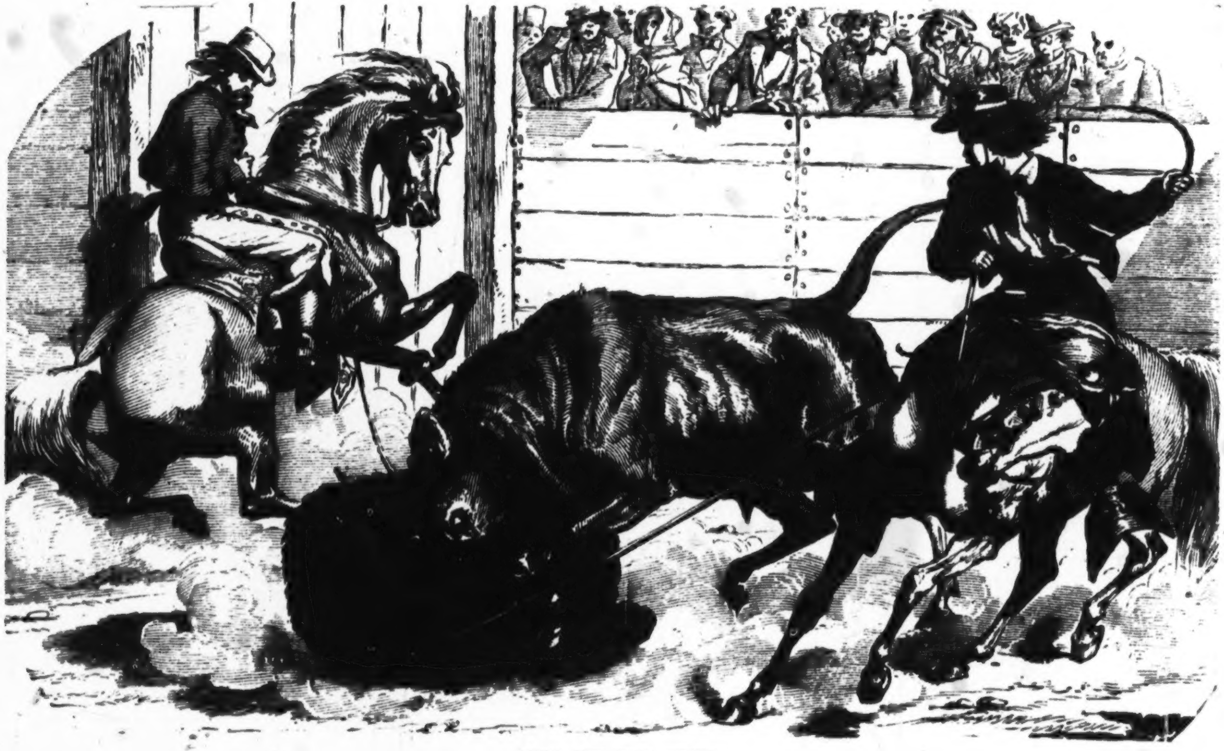
California in her zoölogical department exhibits many interesting and entirely new specimens of beasts, birds, and fishes, many of which are of great size, beauty, and value, either on account of their meat or fur; and to the sportsman they present a field of great attraction.

The discovery of the bones of immense animals at a great depth in the earth, and of a size larger than any specimens now known upon the continent, assures us that, at some remote period, animals of enormous size and of a species unknown to the present age roamed the hills and valleys of California.

The bones of Indians, Indian arrows, and stone mortars have also been found at a great depth in the earth, showing that man existed in the country before the great convulsion of nature which pushed up the Sierras and elevated the Sacramento and San Joaquin valleys above their ancient levels.

## ANIMALS.

The grizzly bear and elk are the two largest animals of California. The grizzly is confined to the regions west of the Rocky mountains, and is to be found throughout the Sierras, foot-hills, and Coast Range. In early days, these bears were very numerous, but are now comparatively scarce and seldom molest man; although there have been many desperate fights between the grizzly and hunters. Their great size, strength,



BULL AND BEAR FIGHT.

and vicious nature render them a most formidable enemy. Many of them are still to be found in the Coast Range within a few hours travel of San Francisco, and generally throughout the timber portion of the State. Their chief diet is berries and herbs.

The black bear, a smaller animal, inhabits the Sierras and the northern part of Oregon. There are also the cinnamon bear and brown bear in the mountains, but none of these are so destructive or vicious as the black bear of Canada and the other British provinces; indeed, none of them will attack man unless pressed to the combat. But the grizzly is combative and destructive, if wounded or brought to bay by his pursuers. The weight of the grizzly is from eight hundred to sixteen hundred pounds; and some, more than seven feet in length and over two thousand pounds in weight, have been killed in the State: these are giants in strength and appearance, far surpassing the lion and tiger.

It was between these monsters and the fierce Spanish bull that the desperate struggles formerly took place, when a dollar a head was willingly paid to see the bull and bear fight in California. These savage sports are rare now but to the lover of brute force they will always form a spectacle of deep interest. The puny efforts of cocks, dogs, and men are tame and insipid compared with the fierce struggle of the bull-pit as seen in California. The pit was circular, formed upon the ground by many posts planted in the earth from eight to ten feet in height, with seats around like the amphitheatres of the Romans. In this pit the grizzly was placed: the bull, after having his nose scarred so that the blood would trickle into his mouth and nostrils, by tasting and smelling which he would become desperate and roar furiously, was ushered into the presence of his mortal enemy. The sight and smell of each was the signal for the other to prepare for battle: the grizzly, with measured step and yawning jaws, coursing the circuit of the pit, would await the assault of his nimble assailant; the bull, with spine as straight as an arrow, horns like lances, and an eye of blood, would nervously survey his antagonist, bellowing deep moans from his bloody lips, and with a leap, such as a Spanish bull only can make, quick as a flash, fierce and terrible, plunge his straight sharp horns into the shaggy coat of the grizzly, from which they would bound as if bruin were a solid ball of rubber. After a few thrusts and passes from the bull, and a few scratches or heavy blows from the paws of the bear, the mountain and valley monarchs with the fury of desperation bound at and grapple with each other; bruin, dodging the fierce thrusts of the bull's horns, rolls upon his back, embraces the head and neck of his antagonist in his powerful arms, and, plying his throat and breast with his hind claws, holds the poor bull in such terrible embrace that the wildest and most desperate plunges are unable to release him from his destroyer. In this struggle the bull generally has his throat and breast torn open, or his neck broken in bruin's hug; but sometimes a fortunate thrust of the bull's horns upon bruin at an unguarded moment may, like a bayonet, pierce his side; in either case, the fight is not regarded a success unless one or both are killed, which is generally accomplished amidst a din of roaring, growling, and frothing of the expiring combatants, and the wild plaudits of the spectators, making the closing scene of these fearful combats the most herculean spectacles of animated nature

The hide of the grizzly is of little value, and his meat is so coarse that it is little sought after. Both the hides and flesh of the other bears in California are valuable.

LION.—The cougar, sometimes called the panther, or California lion, is found in most of the wooded districts of the State. It is larger than the largest dog; mottled with dark stripes, and sly, cunning, and restless; pounces upon its prey from a tree-top or hiding place, is cowardly, and seldom attacks man.

The jaguar or American tiger, also the wild cat and mountain cat, wolf, several species of foxes, and the cayote, are found in the mountains and hill-sides of the State. All the species of foxes are small, and therefore inferior to the Canadian fox. The badger, raccoon, glutton, skunk, weasel, fisher, sable, mink, land and sea otter, beaver, squirrels in great abundance and variety, seals and sea-lions, are also found either in the rivers or bays of the coast of California, and northward in the waters of the Pacific coast. No species of land or water fur-bearing animals produce such valuable fur as their species do in the more northern regions. Fine furs and good fish are found only in cold climates, if we except the salmon of California.

Of seals there are many varieties: the small, spotted seal, the fur seal, and the sea-lion—the latter a species inhabiting the rocky cliffs and small islands of the Pacific ocean. A species of this seal or sea-lion inhabits the clump of rocks directly south of the Golden Gate, in front of the Cliff House, affording much amusement to visitors by their howling and floundering about upon the rocks. Some of these animals are of immense size, larger than an ox. They are at this place protected from the sportsmen by State law. Immense numbers of sea-lions of a very large species inhabit the Farallones, a clump of islands of rock directly west of the Golden Gate. Along the lower coast of the State several parties are employed killing seal and sea-lion, and trying oil from them. The larger species at the Farallones are not very valuable for oil or for their pelts. The fur seal increases in numbers northward along the Pacific coast; it is unknown in the vicinity of San Francisco, but is occasionally found in waters along the Oregon coast, and in myriads in Alaska: the fur is very valuable.

The large gray squirrel and gopher seem to have complete possession of the whole country. They both burrow in the ground, which seems to be alive with them, for at every step the traveller is confronted with heads popping up and down in rapid succession, with innumerable pairs of little round eyes staring him in the face. During the dry season the valleys and hillsides are completely honeycombed with these nimble pests, which destroy hundreds of thousands of bushels of wheat and barley annually. The large gray squirrel is very handsome, is almost as large as a cat, with a large, bushy tail, and is good eating. Hare, rabbits, rats, and mice are abundant and in great variety.

Elk and Deer.—The California elk is the same as the Canadian moose, only the former is much larger, with large, branching horns like those of the deer. At one period elk were very numerous, but are now found only in the northern part of the State and in the mountain ranges; they are very plentiful in Oregon. Deer are still numerous, and seem to abound all over the

State. There are several varieties: the mule-deer, black-tail, antelope, and white-tail.

In many parts of the Sierras is found the mountain-sheep. It is double the size of the domestic sheep; the body is covered with a coarse hair; the horns are enormous, heavy and curling. It is said that when pursued, it will leap down the terrible precipitous walls of the Sierras, landing upon its head and horns below; and thus, bounding from cliff to cliff, escape its pursuer. It is very shy, and rarely captured.

## BIRDS.

The "American eagle" is not only found in every Fourth of July oration all over the coast, but in his original grandeur among the crags and waterfalls of the Sierras and Coast Range. Geese, swan, and ducks are plentiful in spring and fall. Swan are not so plentiful as ducks and geese; they are very numerous, however, in Oregon. Geese are so abundant in many parts of California and Oregon that they destroy vast fields of growing grain, and hundreds of them are killed by the farmers and hunters by sticking sharp-pointed stakes in the grain-fields: the geese descending at night cannot see these sharp perpendicular poles, and in their descent strike upon them and are pierced and killed.

QUAIL.—This beautiful bird, a species of the grouse but only half its size, is found in great quantities all over the State; every clump of bushes, wheat-field and vineyard is inhabited by them. They are plump, sweet and pleasant to the taste, and are a staple article of food. They are protected by law from the sportsman during the spring and summer months. A species of grouse is found in the northern part of the State, and the prairie-hen in the extreme northeastern portion.

The pigeon and dove are plentiful throughout California. The gull, robin, sparrow, swallow, blackbird, and the familiar crow are all well represented in California; and the sand-hill crane bathes his shrunk shanks as deliberately in the waters of the Pacific as does his eastern brother in the waters off Cape Cod or in those of the Chesapeake. Woodpeckers, snake-killer, cuckoo, fish-hawk, chicken-hawk, bat, owl, buzzard, vulture, raven, jay, magpie, king-fisher, humming-bird, tanager, tittark, chat, bluebird, thrush, wren, oriole, lark, linnet, grosbeak, bittern, heron, plover, snipe, curlew, rail, brant, pelican, petrel, or "Mother Carey's chickens," albatross, cormorant, loon, murre, and a great number and variety of water, land, and singing birds, make up the rare and large variety of birds inhabiting California, numbering more than three hundred and fifty distinct species.

## REPTILES.

There are fewer reptiles in California than in any of the Atlantic States; the long, dry summers are not congenial to their species. The reptiles of California are entirely different from those of any other part of the world, and are generally smaller than those of the Eastern States. Snakes are rare; the rattlesnake is the only poisonous one known, and is very scarce. In some portions of the State the scorpion is found, but is very rare.

One of the most poisonous and dread reptiles is the tarantula; amputation of the limb often being necessary, after the bite of this loathsome creature. It is of the spider species, sometimes growing to the size of a frog; the body is covered with a thin brown hair, and its spindling legs project three to four inches from each side. It lives in a little house made in the side-hills or in rocks, and constructed with great skill; a door to its home, which hangs upon a hinge from above, fitting so closely that it can scarcely be detected; there are little holes through this door, into which it inserts its claws to open the door, or holds it inside if attacked, and keeps it secure. It has a mortal enemy in a species of large wasp. This wasp, strange to say, makes the body of the living tarantula the place of deposit for its eggs. The tarantula is in great dread of these wasps, and flees from them, locking itself in its secure home if it reaches it, before it is pierced by the planter of the female wasp. The eggs of the wasp being ready to deposit, the female sails abroad in search of a tarantula; at sight she vigorously attacks it, thrusting her eggs into its body; if the tarantula is not killed at once, it only finds its home with the seeds of death in it, for the eggs of the wasp soon hatch little ones, which remain in the flesh of the unfortunate animal, upon which they feed until death relieves it of its terrible consumers. The tarantula seldom bites man, is shy, and will escape upon the approach of any noise or the presence of a human being.

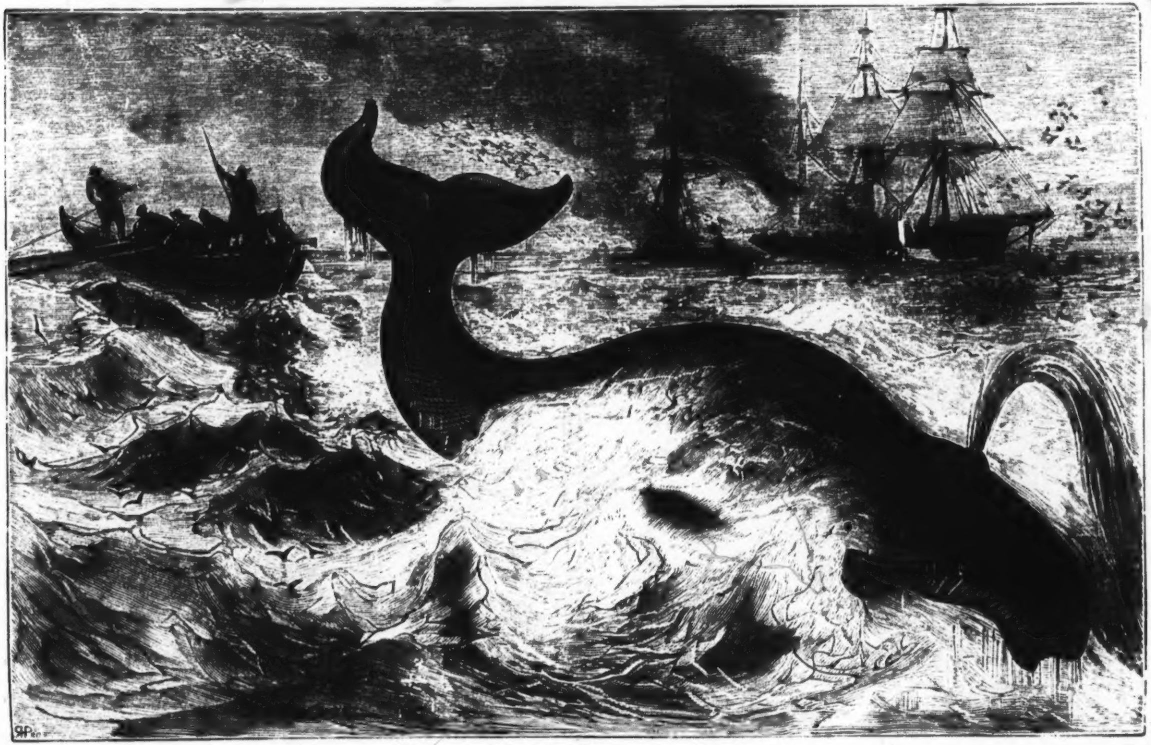
There are great numbers and varieties of lizards in California, varying from one and two inches to a foot in length. The larger species are found in the southern part of the State; none of them are poisonous or vicious. Frogs and toads are plentiful throughout the State. The "horned toad" inhabits the southern part of the State, and is the most unsightly thing on the earth; it often grows to a length of seven or eight inches, about three inches in breadth, and seems to be of the lizard species; two horns, from about an inch to one and a-half inches in length, grow directly where the horns grow upon a cow; it has a tail of half the length of the body: the whole body, legs, belly, and tail to its very tip, is covered with thorny scales, ending in sharp, diamond-pointed horns. The appearance of this little animal is not calculated to make it many friends or admirers, yet it is perfectly harmless.

BEES.—The native bees of California are very numerous in the southern part of the State, living in hollow trees where they deposit great quantities of honey. The domestic bee thrives all through the State and in Oregon, making honey from the fir trees and flowers of the country.

Wasps, mosquitos, and flies are plentiful, and California may not only be called the land of gold but also the land of the *flea:* here this pest of the human race attains a size, agility, and perseverance worthy of a better cause than that of its occupation. Grasshoppers are numerous, but generally not destructive; occasionally myriads of them in some seasons will pass over a section of country, completely destroying every thing green, blocking up roads, filling wells, springs, and houses, from which they drive the inhabitants. On the plains, they so swarm on the railroads that they stop the trains, their bruised bodies so greasing the rails that sand has to be used to counteract their effect.

## FISH.

California is well supplied with a great variety of fish, from the sperm-whale to the shrimp. There are over



WHALE FISHING OFF THE COAST OF ALASKA.

two hundred varieties of fish in the ocean, bays, rivers, and lakes of the State, many of them entirely unknown elsewhere. Shell-fish are abundant, and the variety very great. Oysters are scarce and small, mussels and clams plenty. Crabs are of great size, some species being more than a foot in width, and are an article of common table food. The "mother-of-pearl oyster" is found in the bays on the lower coast and in the Gulf of Mexico. The squid grows to a great size on the coast, some being more than three feet in length, with arms in some cases over seven feet long. Shrimp, the counterpart of a young lobster, swarm in myriads in the bays; they are about the size of an overgrown grasshopper; they have a thin, tough shell like a lobster; in the restaurants and hotels they are a common article of food, and are much liked by many. Lobsters are plentiful, and grow to a great size, in some instances measuring a foot and a-half in length: strange to say, none of them have the large claws of the Atlantic lobster.

WHALE.—The Pacific ocean, from Behring's strait southward to the coast of California, is the great whale-ground of the world. Fleets of vessels are yearly engaged in the whale fishery, making Honolulu their headquarters. Few whales are caught upon the coast of California, although hundreds of them can be seen blowing and spouting along the entire coast, from Panama to the Columbia river; occasionally one of these monsters of the deep finds himself inside the Golden Gate, where his dashing about like a goldfish in a globe and his spouting attracts the boatmen, who give him lively chase. At other times a "northwester" dashes one upon the beach, where he lies stranded like some "gallant ship;" upon such occasions, "whale" is in the mouth of everybody. The fortunate finder of a stranded whale generally "locates" a "claim" upon him, erects a wall around him, and collects an admission fee from the curious who desire to see a "big fish." In the Bay of Monterey, and at other points along the southern coast, a small species of whale is caught, and considerable quantities of oil are made.

There is but one species of fish in California which in quantity and rich flavor surpasses the species of the Atlantic ocean: that is the salmon, so abundant in all the principal streams of the coast, from the Golden Gate to Behring's strait. About November, they enter the Bay of San Francisco; and from that period until they again seek the ocean, in June following, they are caught in great numbers in the Sacramento and San Joaquin rivers and all the rivers north. They are a staple article of food, and can be found in good supply fresh in the markets every day in the year. Some of them are of great size, weighing as high as sixty pounds; but the general weight is from twenty-five to thirty pounds.

Sturgeon are abundant in the bays and rivers, but are coarse, cheap, and generally not much liked as food. Trout are plentiful in most of the lakes and streams of the State, but are neither so beautiful nor sweet as the Atlantic trout. All the fish on the coast except the salmon, smelt, and trout are long, coarse, poor, and tasteless, compared with the same species on the Atlantic coast. A small, poor quality of mackerel is caught in and about Monterey bay. A small but very good quality of herring is very abundant, and is caught in great quantities in spring in the Bay of San Francisco and along the coast. The real cod is not found on the coast of California, but is abundant, although of a small class, on the coast of British Columbia and Alaska. Rock-cod, a very bony fish, is plentiful; also tomcods, smelts, and soles or flatfish. The eel is not found on the Pacific coast, although several species resembling it, called eels, are to be found, but all inferior.

Besides those mentioned, there are a great many other kinds of fish in California, the market being supplied every day in the year with great abundance and variety; the prices are very low.

# CHAPTER XX.

The precious metals—First mention of gold—Gold in Eden—Gods of the heathens—Aaron's golden calf—Ornaments of Jerusalem—Gold of the Romans—First gold in America—Gold in South America and Mexico—Gold in Asia and Europe—Gold-mining in the United States—Discovery of gold in California—Sir Francis Drake's voyage—Expedition of Commodore Wilkes to California—Product of gold—Mining operations—Quartz and quartz-mining—Rich mines—Quartz mills—Discovery of gold in Australia: yield of the precious metals in—On the Pacific coast—Mineral wealth of Great Britain—Progress of mining in Australia—Chinese in the gold-fields—Precious metal in the world.

In the chapters of this volume treating upon the early gold discovery, geology, counties, &c., will be found much information respecting mining in California. (See these chapters.)

The discovery of gold brought California prominently before the world. Had it not been for that event, more than likely San Francisco would be to-day an obscure outpost upon our western coast; Oregon would still be a Territory, Alaska still under the imperial flag of the Czar, and the great valleys of California untilled.

From the earliest period of which we have any knowledge, the precious metals have been sought for by all nations and classes, and the effects of their influence understood and appreciated. The earliest records of the human family make mention of gold, and the kings, priests, and prophets of ancient times seem to have fully understood its value. Abraham's riches, as mentioned in Genesis xiii, 2, are said to have consisted of cattle, silver, and gold. Even the Garden of Eden is supposed to have contained the precious metals. In Genesis ii, 11, 12, gold is spoken of simultaneously with the creation, and as existing in the land of Havilah, which was encompassed by the first river running from the Garden of Eden.

Gold formed the gods and idols of the ancients; and Aaron formed a calf of gold for the children of Israel, but Moses reduced it to powder by burning it in a fire. Solomon employed gold in great abundance in ornamenting the temple of Jerusalem.

South America early produced her share of gold. Atahuallpa, the Inca of Peru, offered gold to the value of $15,480,710 for his ransom when a captive of war. The land of Ophir (the location of which is still a mystery) supplied the Phœnicians and Israelites with gold; once in three years the ships of King Solomon completed a voyage there and back. The Pyrenees and Alps supplied the Romans with much of their gold. Spain obtained her supply of the precious metals along the Tagus; and the Athenians obtained gold in Thessaly and the island of Thasos.

At the time of the discovery of America, in 1492, the total value of the precious metals in the whole of Europe was estimated at one hundred and seventy million dollars. In the year 1600, it had increased to six hundred and fifty million dollars—an increase of four-fold in a century. So, in a corresponding degree, the value of gold decreased, in the fact that every commodity of merchandise had advanced four-fold in this period, and a corresponding increase in every article of consumption keeps pace with the increase of the precious metals.

The total amount of the precious metals in circulation throughout the world, in 1872, is estimated at four billion dollars. Of this amount California has, since 1848, contributed one billion dollars, and Australia, since 1851, an additional billion dollars. Thus it will be seen that California and Australia, in the brief period of twenty years, have contributed to the world one-half of its gold.

In estimating the wealth of nations and the value of products, it must always be borne in mind that, while mines of gold and silver become exhausted, the *metals* produced do not, but, unlike the product of shop and field, which becomes extinct on use, the precious metals retain their value for ages.

From 1492 to 1500, about fifty-two thousand pounds sterling in gold went annually from the American continent to Europe. Up to 1519, of the precious metals gold *only* was found in America.

With the conquest of Mexico, in 1521, and the discovery of the rich silver mines of Potosi, in 1545, a large supply of silver found its way from America to England. In the reign of James VI, gold was mined in the slate rocks of Leadhills, Scotland; and near the close of the last century fifty thousand dollars in gold was collected in two months, in the county of Wicklow, Ireland. At Cornwall, Devonshire, in Wales, and other parts of Great Britain, gold has been mined for, but never profitably.

In almost all the mountains and streams of Europe and Asia gold has been discovered in less or greater quantities, on the Rhine, Rhone, Reuss, Danube, and Aar, in the Alps, and Siberia. Up to the date of the discovery of gold in California, Russia was the greatest gold-producing country in the world. Crœsus is supposed to have obtained his gold in the sands of the River Pactolus, in Asia Minor.

The gold product of Borneo is supposed to be about five million dollars per annum.

Gold has been obtained in Japan from time immemorial. During the sixty years that the Dutch traded with that country, they are supposed to have carried away in trade over forty million dollars in gold.

The whole region of South and Central America and Mexico is rich in gold and silver. The heathens of the Isthmus of Panama of past centuries made their gods of gold, and interred them in the graves of their dead. A few years since, mining for *gods* was a profitable employment in New Grenada.

Gold-mining in the United States is comparatively of a recent date; the first discovery being made in North Carolina, in 1799, in Meadow creek, a small stream in Cabarrus county. It was discovered by a boy named Conrad Reed, who, on a Sunday, was sporting and catching fish in the stream. He saw a yellow lump of metal in the water and carried it home; his father took it to the village silversmith at Concord, but he was unable to tell what it was. For three years the lump, which was about the size of a small smoothing-iron, was used as a weight against the door; when, in 1802, the old man Reed carried it to Fayetteville: there a jeweller pronounced it gold, melted it into a bar, and paid Mr. Reed three hundred and fifty dollars for it, much to his surprise and delight. Meadow creek was soon thoroughly explored, when considerable gold was discovered. In 1803, one piece found in that stream weighed twenty-eight pounds, another sixteen pounds. In 1831, a rich quartz vein was discovered in the vicinity of Meadow creek, and, from this period, mining for gold was pushed with interest in North Carolina.

Previous to 1825, but little gold was found in the United States; some small quantities were found in Alabama, and between the Coosa and Potomac. In 1825, a gold-bearing quartz lead was discovered by a Mr. Barringer, at Montgomery, North Carolina. Soon after this, gold-bearing quartz was discovered in Virginia, Georgia, and South Carolina; and gold in small quantities was obtained from many rivers in these States.

In 1824, the first native gold appeared in the United States mint at Philadelphia. The supply increased considerably for a few years. Up to 1827, North Carolina was the chief gold-producing State in the Union.

The entire product of gold of the five Southern States, from 1828 to 1872, is estimated to have been forty million dollars, as follows: North Carolina, eighteen million five hundred thousand dollars; Georgia, fourteen million five hundred thousand dollars; Virginia, three million five hundred thousand dollars; South Carolina, three million dollars; Alabama, five hundred thousand dollars. In 1829, the first mint deposit of gold from South Carolina—thirty-five hundred dollars—was made; in the same year, Virginia deposited twenty-five hundred dollars; and, in 1830, Georgia deposited two hundred and twelve thousand dollars.

The increase of gold from the Southern States was so great that, in 1837, a United States mint was established at Charlotte, North Carolina, and another at Dahlonega, Georgia. It is estimated that the Southern States yielded an average of one million dollars in gold annually, from 1808 up to the discovery of gold in California in 1848. Gold in these regions was generally obtained from decomposed quartz and from slate rock of such a poor quality that it seldom paid for working; and of late years the yield has greatly fallen off, it having been for the last twenty years less than five hundred thousand dollars per annum. Gold has been discovered in Pennsylvania, Maryland, New Hampshire, and Vermont, but not in quantities to justify working.

In many parts of Canada gold has been found in small quantities; and, in 1860, free gold in well-defined quartz ledges was discovered in the southeastern part of Nova Scotia; these mines are still profitably worked.

The discovery of gold in California in 1848, and in Australia in 1851, introduced a new era in the production of the precious metals. Gold is known to have been discovered in Australia as early as 1839, by Count Strazelecki, who, in September of the following year, informed the lieutenant-governor of the colony of his discovery. In 1841, the Rev. Mr. Clark announced that he had discovered gold in Australia; and, from the year 1843 to 1847, Sir Roderick I. Murchison repeatedly urged the exploration of Australia for the precious metals. In February, 1851, a Mr. Hargrove, who had been in California, found gold in Australia, and in April following announced his discovery, which led to the finding of the vast gold-fields of that region, so rich and so profitably worked up to the present period, with prospects of inexhaustible supply.

## GOLD IN CALIFORNIA.

The first mention of gold in California is found in a small volume of romance published in Spain in 1510—seventy years before the arrival of Sir Francis Drake in California. The book is entitled "*The Sergas of*

*Esplandian, the son of Amadis of Gaul.*" (See Chapter XIII of this volume.) In this romance the following passage occurs: "The island was the strongest in the world, from its steep rocks and great cliffs. Their arms [the natives'] were all of gold, and so were the caparisons of the wild beasts they rode."

The next mention of gold in California is found in Hukluyt's account of Sir Francis Drake's voyage to California in the summer of 1579. In this account a paragraph reads: "There is no part of the earth here to be taken up wherein there is not a reasonable quantity of gold or silver." This statement of Hukluyt is a pure fiction, like the account of the Spanish novelist of 1510, and was only intended to lend a charm to the distant land of California. Most of Californians well know that there is not a shovelful of earth in the vicinity of Drake's bay, or any portion of the coast wherein the English buccaneer spent the six weeks in 1579, in which there *is* "a reasonable quantity of gold or silver," so far as known, nor has either of these metals been discovered in any quantity up to the present time within the radius of one hundred miles of Drake's bay, in Marin county.

Placer gold in small quantities had been discovered in California at various times between the years 1775 and 1828, near the Colorado in the southern part of California; in 1802, a vein of mineral supposed to contain gold was discovered at Olizal, in Monterey county; and, in 1828, small particles of placer gold were discovered at San Isdro, in San Diego county; but none of these indications of the precious metals were sufficient to attract public attention, or to warrant the belief that gold existed in paying quantities in the country.

Alexander Forbes, the British consul at Monterey, in writing a history of California in 1835, says: "No minerals of particular importance have yet been found in Upper California, nor any ores of minerals." In 1838, at San Francisquito, about forty-five miles northwest from Los Angeles, placer gold was discovered in small quantities; these mines were worked steadily for many years with considerable profit.

James D. Dana, who accompanied the expedition of Commodore Wilkes as mineralogist to the coast of California in 1841, and who made a trip from the Columbia river, overland through Oregon and by the Sacramento valley, to San Francisco, in his official report to the Congress of the United States, mentioned that gold had been found in the Sacramento valley and in Southern Oregon; but Dana did not seem to be much interested in the discovery, nor to consider it of any importance.

On the 4th of May, 1846, Thomas O. Larkin, United States consul at Monterey, in an official correspondence with James Buchanan, the Secretary of State, said: "There is no doubt but gold, silver, quicksilver, copper, lead, sulphur, and coal mines are to be found all over California; and it is equally doubtful whether, under their present owners, they will ever be worked." On the 7th of July following—sixty-six days after the date of this communication—the stars and stripes floated over Monterey, and California was a part of the American republic.

On the 19th of January, 1848, ten days before the signing of the treaty of Guadalupe Hidalgo, James W. Marshall discovered gold at Coloma, on the American river, as has been described in a preceding chapter.

On the 15th of March following, the first printed notice of the discovery was made in the *Californian*, published at San Francisco, as follows:

> "In the newly made race-way of the saw-mill recently erected by Captain Sutter, on the American fork, gold has been found in considerable quantities. One person brought thirty dollars to New Helvetia, gathered there in a short time."

The same paper, May 29, 1848, announced that its publication would be suspended, as follows:

> "The whole country, from San Francisco to Los Angeles, and from the sea-shore to the base of the Sierra Nevada, resounds with the sordid cry of *gold! gold! gold!* while the field is left half planted, the house half built, and every thing neglected but the manufacture of picks and shovels and the means of transportation to the spot where one man obtained one hundred and twenty-eight dollars worth of the real stuff in one day's washing, and the average for all concerned is twenty dollars per diem."

From 1848 to the present period, the gold mines of California have been worked most successfully; not always certainly with profit to those engaged, but in the aggregate producing almost one billion dollars. The following table will show the annual product for the last twenty-four years:

| | | | |
|---|---|---|---|
| 1848, | $10,000,000 | 1861, | $40,000,000 |
| 1849, | 40,000,000 | 1862, | 34,700,000 |
| 1850, | 50,000,000 | 1863, | 30,000,000 |
| 1851, | 55,000,000 | 1864, | 26,600,000 |
| 1852, | 60,000,000 | 1865, | 28,500,000 |
| 1853, | 65,000,000 | 1866, | 26,500,000 |
| 1854, | 60,000,000 | 1867, | 25,000,000 |
| 1855, | 55,000,000 | 1868, | 25,000,000 |
| 1856, | 55,000,000 | 1869, | 25,000,000 |
| 1857, | 55,000,000 | 1870, | 25,000,000 |
| 1858, | 50,000,000 | 1871, | 25,000,000 |
| 1859, | 50,000,000 | | |
| 1860, | 45,000,000 | Total, | $961,000,000 |

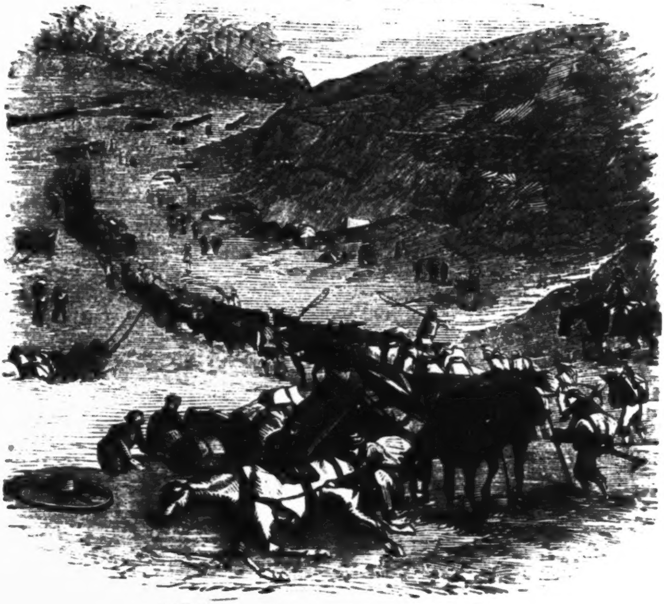
It will be observed that the decrease has been steadily going on since 1853: this is owing to the fact that about that period the rich placers and river beds were vigorously worked, and that a few years after this period most of this class of mines were worked out, and quartz, cement, and bank diggings had to be operated at a great outlay and often with but indifferent results.

The mineral belt in California extends from the Oregon State line, on the north, southward the entire length of the State, and to the summit of the Sierras on the east, from which it extends a distance of from fifty to seventy-five miles west, embracing the western slope of the Sierras. This district embraces all the Sierra range in California, with the heads of all the important rivers in the State and the foot-hills and gulches of the Sierras —the richest gold-bearing region ever discovered. Within this wide range gold has been found in its virgin state on the sides and ravines of grassy hills, the summits of high table-lands, sandy and gravelly flats, the rich loam soil of the gardens and wheat-fields, the ridges, sand-bars, and beds of living and ancient rivers.

During the first five or six years after the gold discovery in California, the efforts of the miners were chiefly directed to mining in the gulches, streams, and river beds; and every available spot of this class swarmed with thousands of gold-seekers, who penetrated every nook and corner in this wide range, and with prospecting-pan, shovel, and rocker, tom, sluice, wing-damming the rivers, sluicing the flats and side-hills, have discovered and pretty thoroughly worked most of the accessible surface-diggings in the State. From this period, (1853,) the time at which the mines produced the largest annual yield, the decline in this branch of mining has been steady; until, at the present time, there is but little surface-mining in the State, except that done by Chinese, who, unskilled in the deeper and more complicated mining of to-day, seek the abandoned placer mines of the whites or such new fields as would not pay white labor, and, by a system of frugality, industry, and sobriety known only to this patient race, obtain large sums from this class of mines—seventy-five cents, one dollar, and one dollar and a-half per day being considered good wages.

With a decline in placer-mining came a decline in wages. In the flush times of '49, an ounce in gold (sixteen dollars) per day was a miner's wages; in 1852, it had fallen to eight dollars; and, in 1853, to five dollars; since which time it has steadily declined until the present, when two to three dollars are the wages. In all these cases, the miner finds himself in board, lodging, &c.; he also often finds it most difficult to obtain employment even at those rates.

Placer-mining is not entirely ended in California, but all ground that would pay the primitive methods of mining during the first few years after the discovery of gold is worked; the *individual* can no longer with crevice-knife, shovel, tom, or pan hope for rewards in any part of the State. These primitive implements, the long lines of sluices, the temporary ditches, winding their serpentine course along rugged hills and spanning deep gulches, ridges, and piles of gravel, wing-dams, water-wheels, saw-mills, tumble-down shanties, abandoned villages, and general debris of the early gold-hunter's home, all proclaim in mute but solemn and fast increasing eloquence the decline of that period in our history when the monthly and semi-monthly steam-



EMIGRANT TRAIN—GOLD HUNTERS 1849

CHINESE, GOLD MINING IN CALIFORNIA.

ers deposited their thousands of gold-seekers in San Francisco, when the "prairie schooner" toiled its weary march over the inhospitable plains, and a population of adventurous, bold, impetuous men, drawn from all quarters of the globe, entered upon that terribly wild, romantic drama, half comic, half tragic, wherein the sharp report of the pistol, the shrieks of the wounded, groans of the dying and disappointed, blasphemy of the wicked, bacchanalian revelries of the drunkard, discordant tones of the hurdy-gurdy and ballet girl, inharmonious squeak of the rude violin of the fandango, the popping of bottle corks, the shuffling of tumblers and the clink of gold on the gambling table, kept time to the click of the pick, shovel, prospecting-pan, and rocker of the busy miner.

On the decline of placer-mining in California the attention of thousands was turned to other pursuits, and from that period dates the permanent prosperity of the State and the development of the vast and varied resources of the soil.

At each stage, as the nature of the mines changed, appliances and machinery were adapted to their working; the pan gave way to the rocker, the rocker to the sluice and shovel, and finally to the use of powder and the hydraulic, which powerful agents levelled the hills and made mining possible and profitable, when under the old system it was both impossible and unprofitable. Vast portions of the gulches and foot-hills of the Sierras which are impregnated with gold, either in particles of floury fineness, scaly or coarse, are now worked by water, carried often a great distance in ditches and flumes; the object in carrying the water in these flumes being to get the elevation as great as possible above the ground to be sluiced. The process of washing is done by attaching a strong canvas or leather hose with a nozzle of two or more inches in diameter, when the water is played upon the face of the bank from numerous streams, as firemen play upon a burning building, so handling the hose and nozzle as to undermine the hills or mountains: these operations often cause the banks to cave in in immense masses, often with fatal result to the inexperienced. Sometimes where the mountain is great or the ground hard, drifts are pierced into its sides, into which great quantities of powder are placed; when this "mine" is exploded, a deep sound like the rumbling of an earthquake is heard, and for miles around the shock caused by the explosion is felt; the hill is shivered to atoms, and the earth and boulders are so loose that the water from the hose soon washes them down. Sluice-boxes are so arranged at the foot of the hill that all the earth and gravel pass through them in the flood of escaping water. In riffles and false bottoms in these sluices are placed deposits of quicksilver; the fine particles of gold being heavier than sand find the bottom of the sluice, and on their passage down in the water are caught by the quicksilver, where they are held in amalgam until the miner finally—once a week or once in several months—cleans out his sluices, takes out the gold and quicksilver, which is in a soft mass of about the consistency of dough. The gold, being all coated with the quicksilver, is put into a retort or close iron vessel and placed in a hot fire; the quicksilver, escaping through a tube, falls into a dish, is caught and saved for future use; the gold, in a solid lump, free from quicksilver, is now taken from the retort and ready for the market or mint.

Another branch of mining is the working of quartz. Lodes of great richness have been discovered in many parts of the State, and have been worked for many years. The first quartz-mining in California was soon after the discovery of gold, and was conducted by Mexicans, who had had experience in this branch in the mines of Mexico. The process was crude, either pounding the quartz in mortars or grinding it in rude arrastars worked by a single mule; but as they worked only rich ores, they generally succeeded in making them pay.

As early as 1850, quartz-mining was commenced at Grass valley, in Nevada county, and soon at other points in the State; but, from ignorance and imperfect machinery, the first five or six years of this branch of mining was a failure, often entailing serious loss upon all concerned. By degrees, experience, cheapness of labor, and improved machinery gave a new impetus to this branch of industry, which is fast on the increase in the State. Throughout the length of the Sierras for about four hundred and fifty miles, and from the summit of that range for a distance of from thirty to fifty miles along its western slope, quartz ledges, generally incased in granite, are found; some of great size and richness, others most seductive and ruinous to all engaged in them.

The chief quartz-mining districts of California are situated in Tuolumne county near Sonora, and Jamestown near Mariposa in Mariposa county; about Clear creek, Tulare county; Angels, Calaveras county; Jackson, Amadore county; Logtown, El Dorado county; Nevada and Grass valley, Nevada county; Downieville, Sierra county; Indian valley, Plumas county.

The extent and width of leads, yield per ton, and production of mines vary very widely. Of eighty-four principal gold quartz ledges recently examined, it was ascertained that the average thickness of twenty-one is from one to twelve inches; twenty, from thirteen to twenty-four; nine, from twenty-five to thirty-six; ten, from thirty-seven to forty-eight; nine, from five to ten feet. It will be thus seen that the ledges are generally very narrow; but as the *quality* has much to do with the productiveness, many of the small leads yield the greatest amount of bullion.

The yield of the eighty-four mines examined run from four dollars to one hundred and eighty dollars to the ton—one mine yielding the former amount, and one the latter. Of the others, three yielded six dollars; four, eight dollars; one, nine dollars; nine, ten dollars; twenty-two, between ten dollars and nineteen dollars; fourteen, between twenty dollars and twenty-nine dollars; fourteen, between thirty dollars and forty-nine dollars; three, between fifty dollars and sixty-nine dollars; and in four the yield was over seventy dollars.

The cost of extracting and working ores varies much; often governed by the location, extent of the lead, freeness of the ore from base metals, fuel and transportation. For instance: in the mine yielding one hundred and eighty dollars per ton, the lead was only two inches thick and it cost sixty dollars to extract a ton of ore; while in a lead fifteen feet wide and yielding fifteen dollars per ton, it cost but fifty cents to extract a ton of ore. The cost of extracting a ton of ore from the mines examined was from fifty cents to twenty-six dollars. The average cost, however, of the eighty-four examined mines was about four dollars per ton; while to work the ore from the time it left the mine until it was in amalgam was from seventy-five cents to seven dollars per ton, or an average of about three dollars. To the price of extracting the ore, averaging about four dollars per ton, the cost of milling, averaging about three dollars per ton, must be added; also, an average of about sixty cents per ton for transportation: making the average expenses for mining and reducing the ore, until the gold is extracted, $7.60 per ton: while the average yield of ore per ton is $18.50, leaving a profit of $10.90 per ton. It must be borne in mind that these figures indicate an *average*, and do not by any means convey the idea that *all* mines pay this amount; for instance: some lodes worked only yield in all four dollars per ton; these are worked at a cost of about $2.50, leaving a profit of $1.50 per ton; while many cost *all* that is obtained, leaving nothing. The famous Eureka mine at Grass valley, Nevada county, yields about forty-seven dollars per ton, and costs about fifteen dollars per ton for mining and milling; leaving about thirty-two dollars per ton net profit.

The average yield of quartz in California and Nevada is the largest of any in the world. In many mines in Austria and Russia, quartz is worked which yields but one dollar and two dollars to the ton; and, in Japan, even lower grades are profitably worked.

The famous St. John Del Rey, in Brazil, one of the oldest and most profitable gold-mines in the world, has produced over fifteen million dollars in about forty years working; yet its gross yield per ton is only $7.59.

The most remarkable mine in the world is the Comstock lode at Virginia, in the State of Nevada, producing gold and silver, but chiefly the latter. It was discovered in 1858, by James Fennimore, who, soon after, sold his interest for a trifle to Henry Comstock. More than fifty companies are at work on this lode, which has produced over one hundred million dollars in bullion since its opening, the yield per ton being about forty dollars. No single lode of ancient or modern times equals this immense mass of ore. The lode proper is located within an area three miles in length by about six hundred yards in width; but the lode proper, in its widest place, is only one hundred and fifty feet, and at some points only a few feet. About five thousand men are employed annually in the various mines on this lode, the average annual yield per man being twenty-five hundred dollars: this is the greatest average yield from any one lode in the world. The mines of California and the districts of Zacatecas, Guanajuato, Sombrerete, Chihuahua, Durango, Potosi, and Alamos pale before the magnitude of this great silver mountain.

The richest mining-district in California is in a radius of four miles around Grass valley, Nevada county, which yields over three million five hundred thousand dollars annually, employing two thousand men, who produce an average of seventeen hundred and fifty dollars to each person; the quartz yielding from thirty dollars to thirty-five dollars per ton. The greatest yield in the State is reported in this district: one thousand dollars per ton from a small lode running a mill of eight stamps only.

It is estimated that about one-third of the gold yield of California is now obtained from quartz; while the remainder is obtained from bank, cement, and placer diggings. Considerable depth has been obtained in some of the quartz mines: the Eureka, at Grass valley, is supposed to have gone to the greatest depth of any in the State—over 1,220 feet; a few others have gone to a depth of from six hundred to seven hundred feet, while most are down from one hundred to two hundred feet.

Improved machinery for crushing quartz, with the decrease in wages, is steadily inducing capitalists to embark in mines partly if not wholly abandoned many years since; still, throughout the entire quartz region of the State, will long remain deserted mines, rickety, tumble-down mills, and rusty machinery, witnesses of the recklessness and folly of the thousands who, through ignorance if not through worse motives, induced capitalists to supply mills before a "lead" had been discovered, only to be abandoned so soon as failure stared them in the face, with the admonition to discover and test a mine before building a mill!

There is no branch of industry or speculation wherein there has been so much deception practised as in the quartz-mining of the Pacific coast. Periodical spasms of excitement are gotten up about some new mining-district; "prospecters" start out and soon return with their "pockets full of rocks," often genuine discoveries but as often rich specimens obtained from some old working mine; assays are made, showing hundreds or thousands of dollars per ton; people become excited, companies are incorporated, shares sold—they look pretty on paper—capitalists invest and lose.

CEMENT MINING.—Within a few years past large bodies of cement in the hillsides and flats of the mining regions of the State have been found to contain gold. This cement is crushed and worked like quartz, and is attracting considerable attention.

**Mining on the Gold Beaches.**—Beginning at Humboldt bay, in Humboldt county, and extending northward for more than two hundred miles upon the beach of the Pacific, both in California and Oregon, the sands of the shore are mingled with fine gold-dust, and, at each convulsion of the ocean, new deposits are thrown to the surface; the violence of each successive storm seeming to heave new treasures from the depths of the sea. Upon this beach miners erect their sluices, guide the waters of the mountain streams through them, and wash the sand of this golden shore for its precious contents. An average of ten dollars to the man per day is made, but, owing to loss of time occasioned by storms and other delays, this species of mining has not always been profitable.

**Quartz Mills.**—It is estimated that there are about four hundred and fifty quartz-mills, with an aggregate of 5,500 stamps, in the State. The machinery of these mills is estimated to have cost over seven million dollars; more than half of them are propelled by steam, the rest by water. There are more than one hundred of them lying idle; some having been erected where no quartz or mineral existed, others upon lodes of poor quality, and some upon ledges now exhausted.

A comparison between the several gold-producing sections of the Pacific coast and California, and the gold product of Australia, and the mineral resources of Great Britain, may not prove uninteresting.

The yield of the precious metals upon the whole Pacific coast for the year 1871 is estimated at $68,000,000: California producing but a little over one-third of this amount. The yield was as follows: California,

$25,000,000; Nevada, $25,000,000; Idaho, $8,000,000; Oregon, $3,000,000; Utah, $2,500,000; British Columbia, $2,000,000; Arizona, $1,500,000; and Washington Territory, $1,000,000. Estimating the gold and silver product of California, since the discovery of gold in 1848 to the year 1872, at $1,000,000,000, and the product of all the other sections of the Pacific coast, from the discovery of gold in them to the year 1872, at $200,000,000, would give an aggregate yield for the whole coast of $1,200,000,000, to the period ending January 1, 1872.

In 1851, gold was discovered in Australia; and, from that period forward to the present, mines, both in placers and quartz, have produced abundantly of the precious metals. In 1852, the gold-mines of Victoria produced $44,375,640; and, in 1856, produced the largest amount of any single year since the discovery—$59,719,820. California's greatest yield was in 1853—$65,000,000. Since 1856, there has been a marked decline in the product of the Australian mines; but these mines produce more at the present time than do the gold-mines of California. The gold-fields of Australia extend over Victoria, New South Wales, New Zealand, and Queensland; and the mines of these regions, from the year 1851 to 1872, have produced an aggregate of gold equal to the whole product of California from 1848 to 1872—$1,000,000,000. The figures following exhibit the result of the periods named, and the product since these last dates is estimated, and is as nigh correct as can well be ascertained.

Victoria, from 1851 to 1868, yielded $711,369,000; New South Wales, from 1851 to 1868, $148,314,125; Queensland, from 1860 to 1867, $2,424,850; New Zealand, from 1853 to 1867, $74,924,280: showing a total within these dates of $937,032,255.

It will be observed in the table of annual yield of gold in California that the amount from the discovery of gold to 1872 is but $961,000,000. Amounts, going from the mines into the hands of private parties, and not easily accounted for, have been estimated to swell the amount in the table to $1,000,000,000; and the estimated aggregate amounts obtained from the Australian mines and the amounts passing into private hands, since the last reports above, will swell the total product of Australia to a little over the entire yield of California.

The approximate value in the yield of the precious metals in California and Australia, considering the large amounts and that the dates of discovery in each country are so close to each other, is something most remarkable in the history of gold-mining and the gold product of the world.

The government of Victoria collects for miners' licenses, miners' rights, leases of gold and mineral lands, and other mining taxes; while in the United States no collections are made, except in a few instances where local governments impose a small tax upon Chinese, and that in violation of the laws of the national government.

In the seven leading mining-districts of Victoria, namely, Ballarat, Beeckworth, Sandhurst, Maryborough, Castlemain, Ararat, and Gippsland, there are 2,431 miles of water races constructed, at a cost of $1,551,350. The area of land held as claims in the same districts is 133,575 acres; and the estimated value of the claims in these seven districts is $44,347,520. The number of machines employed in alluvial mining are 441 steam-engines, 1,887 pumping machines, 298 whims, 320 whips, 261 cradles, 19,346 water-wheels, 643 stamps crushing cement; and the number employed in quartz-mining are 602 steam-engines, 66 crushing machines, 5,977 stamps, 512 whims, 436 whips. The value of all the mining machinery and appliances used in mining in Victoria is estimated at $10,752,160.

The number of men engaged in mining in Victoria, in 1851, was 19,300; the largest number in 1860, 108,562; and the number in 1868 was 64,658.

In 1857, there were 36,327 Chinamen working at the mines in Victoria. In 1868, the number was reduced to 15,300. The remainder have nearly all returned to their native land. Only fifty-six of the 15,300 were working at the quartz mines; the balance were working on the alluvial mines.

In 1852, the average earnings of miners was $1,310; in 1862, it fell to $336; in 1868, the average rose to $520 per man per annum.

Gold, of all metals, has a peculiar charm for the human family, and the real value of the baser metals is often ignored in the thirst for the circulating medium as it comes glittering from the mine or the mint. Great Britain does not produce the precious metals, yet her annual yield of minerals far surpasses all the gold of California, and that in such magnitude that there is no comparison. The annual value of the mineral products of Great Britain is about three times as great as the greatest annual yield of gold in California, and eight times as great as the mines of California produce at the present period. The value of the minerals taken from the mines of Great Britain, in 1869, was $176,269,000.

If we calculate this amount by twenty-four, the years of the existence of the gold-mines of California, and in which they have produced $1,000,000,000, we will have the aggregate sum of $4,230,456,000 worth of iron, lead, copper, tin, and coal in Great Britain, against $1,000,000,000 of gold produced from all the mines of California within the same period. A feature worthy of notice in connection with this subject is that, while the yield of the precious metals in California is steadily on the decrease, the production of the mines of the British islands is steadily on the increase. But it is doubtless only a question of time when the supply from the earth must give out.

The minerals raised from the earth in the United Kingdom, in 1869, were of the value of no less than $176,269,000. This amount exceeds that of the preceding year by upwards of $8,000,000. The coal produced in 1869 was 107,427,557 tons. The returns for 1868 showed only 103,141,157 tons produced, being less than in 1869 by above four million tons. The production of iron ore in 1869 advanced to 11,508,525 tons, of the value of $16,000,000; the quantity is about 1,340,000 tons more than the year preceding. The great increase is in North Staffordshire and in Scotland. The tin ore amounted to 14,720 tons, and copper ore, 129.953 tons.

MINERS AROUND THEIR CAMP-FIRE.

## CHAPTER XXI.

Tunnel-mining—Sutro tunnel—Canals—Ditches—Asphaltum—Cement—Coal—Copper—Cobalt—Nickle—Diamonds—Electro-silicon—Gypsum—Iron—Lead—Petroleum—Quicksilver—Salt—Sulphur—Tin—Marble—Granite—Caves—Mining laws—Mining laws of Spain and Mexico—Geology and mineralogy—Great mines of the world.

TUNNEL-MINING.—Tunnel-mining is carried on to a considerable extent in California: mountains are pierced through granite and slate, for great distances and at great expenditure of time and money, in order to reach quartz veins; the object being to strike the lode as low down as possible, so as to drain the mine of water and extract ore: when the lode is reached, drifts and branch tunnels enable the miner to quarry the quartz, which finds its way through the main tunnel to the surface or the mill, where it is ground and the metal extracted. Mountains are also often pierced in order to reach the deposits of gold dust in the beds of ancient rivers and basins, which in many instances have proven very rich.

SUTRO TUNNEL.—The grandest project in tunnel-mining in America is the Sutro tunnel, at Virginia City, in the State of Nevada, intended to cut the famous Comstock lode, and pass under Mount Davidson at a depth of 7,827 feet from its top, which is 1,622 feet above Virginia City.

The Comstock lode will be reached by this tunnel at a distance of twenty thousand feet, or three and one-fourth miles, from its mouth, and be cut at a perpendicular depth of 1,900 feet—or 2,900, following the dip of the lode. At the beginning of the year 1872, the Crown Point, Belcher, and other mines on this lode had reached a depth of 1,700 feet, developing marvellous richness. The present working of all the mines on this lode is done by the tedious and expensive process of hoisting through shafts and pumping out water. The tunnel when completed will drain the mines to a great depth, and open a wide avenue for transporting ores from the vein on cars. It is estimated that three and a-half years from January 1, 1872, will be necessary to reach the lode by this tunnel, involving an outlay of four and a-half million dollars.

Congress, by act of July 25, 1866, has made liberal donations to this project, granting in perpetuity a belt of rich mineral land through which the tunnel passes, seven miles in length and four thousand feet in width—5,080 acres; also, 1,280 acres of land at the mouth of the tunnel, the exclusive ownership of all mines discovered by the tunnel, and a royalty forever of two dollars on each ton of ore extracted from any part of the Comstock lode after the vein is reached by the tunnel. The payment of this amount is made compulsory by the same act. From this tax the tunnel company will derive a large revenue. Work on the tunnel is being vigorously pushed.

Deep mining, on *true* silver veins such as the Comstock, has proved most successful. The shafts now down three thousand feet on the Sampson mine, in Germany—the deepest in the world—demonstrate continued and improving richness.

Beyond all doubt the Comstock lode is the most extensive and the richest quartz mine in the world, far surpassing any thing in Mexico, South and Central

America, and Europe. Granada, in Spain; Kongsberg, in Norway; Pasco, in Peru; Potosi, in Bolivia; Chañarcillo, in Chili; Valenciana, Veta Granda, Real del Monte, of Mexico; the Schemnitz and Felsobanya, of Hungary—although representing the great silver supply fountains of the world—all pale before the magnitude of the Comstock, of Nevada.

The lode proper, as developed in the Comstock, extends five miles in length, and has a width of from fifty to five hundred feet. Fifty steam-engines and three thousand men are employed in working the various mines, which were opened in 1859, and have yielded, up to January, 1872, an aggregate of one hundred and forty million dollars—of which ninety million dollars was silver and fifty million dollars gold.

With the present mode of working, rock yielding less than twenty dollars a ton is not worked. because it will not pay.

The annual yield from the Comstock is now about sixteen million dollars, and of the State of Nevada twenty-five million dollars.

The Austrian government has but recently completed the adit-level of Joseph II, commenced in 1782, leading from the valley of the river Gran to the mining district at Schemnitz, a distance of ten miles, cutting the veins at a depth of fourteen hundred feet. It is ten feet wide and twelve high, used both as a railway and canal, and was constructed partly to explore for new veins and partly to drain mines already in operation. The Schemnitz mines, in the northern part of Hungary, furnish gold, silver, iron, lead, copper, and sulphur—gold to the value of about seventy-five thousand dollars, silver seven hundred thousand dollars—the annual value of all the metals not exceeding one million five hundred thousand dollars.

The celebrated silver mines at Freiberg, in operation since the commencement of the thirteenth century, are at present drained by an adit beginning on a tributary of the river Elbe, extending something over eight miles, so as to communicate with all the mines in the upper part of the district, being over eight feet wide and nearly ten feet high, securing a drainage at a depth of sixteen hundred feet. But, as the ore of these mines continues to increase in richness with the depth, it has been proposed by eminent engineers, and the government of Saxony it is said has in contemplation the construction of an adit-level of the extraordinary length of twenty-two miles, opening in the river Elbe, and cutting the veins of the Freiberg district at the average depth of two thousand feet. Should this bold conception ever be carried into practical effect, it will constitute one of the grandest enterprises of the present age, and the most extensive mining tunnel in the world.

The Freiberg mines, to which so much talent, energy, and such vast expenditures of money are being devoted in contriving works to operate and improve them, yield a silver product of the annual value of about one million dollars, and in a period of nearly three hundred and fifty years have produced an aggregate value not exceeding one hundred and twenty million dollars.

The Harz mines, in the district of Clausthal, in the former kingdom of Hanover, are drained by a tunnel penetrating the mountains for a distance of six and one-half miles, nine hundred feet beneath the town of Clausthal, commenced in 1777 and completed about the beginning of the present century. The first tunnel in the Harz for draining mines was commenced in 1525, and before the end of that century three more were constructed; and, in 1799, another was completed of a length, including galleries, of nearly eleven miles.

In 1851, the Ernst August tunnel was commenced in the neighborhood of Gittelde to drain the deep mines of the Clausthal district, estimated to require twenty-two years in its completion, but by the improved appliances now used in tunnelling was finished in 1864—in twelve years and eleven months. This is said to be the largest tunnel in the Harz, and furnishes the deepest natural drainage to the mines that can ever be obtained. The water in this tunnel has sufficient depth to allow the use of long flat-boats for the transportation of the ore.

The mines of the Harz are chiefly argentiferous galena, with copper pyrites, iron pyrites, and gray copper ore, producing annually a supply of silver worth six hundred thousand dollars; lead, five hundred and seventy-five thousand dollars; copper, ninety thousand dollars; iron, one hundred and twenty-five thousand dollars; or an aggregate value of one million four hundred thousand dollars.

It will thus be seen that the combined yearly product of Schemnitz, Freiberg, and the upper Harz, for the profitable working of which the best engineering talent of Europe has been taxed for a period of three centuries to provide means of drainage and ventilation, and the governments of Austria, Saxony, and Hanover have lavishly expended so much money, is not much over four million dollars, or about one-fourth of the value of the gold and silver annually furnished by the Comstock lode.

In all the localities above referred to, where deep drainage has been effected, the result appears to have fully realized the expectations of the projectors, so much so at Freiberg that it is contemplated to drive an adit far surpassing any similar work yet undertaken, and reaching a lower level than any hitherto attained in that locality; and both in Freiberg and in the Harz the ores appear not merely to have maintained their quality, but even to have increased in richness with the depth of the mine.

The great Sampson vein, on the Harz, has been worked to the depth of 2,580 feet, being the deepest mine now in operation on the globe. At the depth of 2,160 feet, one of the finest accumulations of ore ever met with was reached; and, although the works have been carried down four hundred and twenty feet further, this superior quality of the ore is still maintained.

A tunnel of fifteen miles in length was commenced some years since in Saxony, intended to open the principal mines of Freiberg; it is supposed that fifty years labor will be necessary to insure its completion.

Quartz-mining is in its infancy in California. The western ridge of the Sierras from its summit is ribbed for its entire length with a series of rich gold quartz veins, and not until these mountains are pierced with such gigantic tunnels as those of some of the mines of Europe and the Sutro tunnel will California begin to yield her golden treasure, now held in the granite coffers of the Sierra Nevadas, awaiting only the touch of scientific labor to open their ponderous doors.

Canals and Ditches.—In every branch of mining water is necessary, and, where it cannot be obtained through natural channels, artificial conveyances must be constructed. To conduct water to the mines scattered over the slopes of the Sierras and foot-hills of California has been a work of great skill, as well as of great necessity, and the whole interior mining district is a complete net-work of ditches and canals. There are over five hundred ditches constructed for mining purposes, making a total length of more than four thousand eight hundred and fifty miles in length. Beside these, there are six hundred and seventy ditches constructed for irrigation in the agricultural regions, extending their waters to more than seventy thousand acres of land.

### OTHER MINERALS BESIDE GOLD AND SILVER.

*Asphaltum*—Which is a kind of tarry substance, issues from the ground in great quantities along the sea-coast in Los Angeles and Santa Barbara counties. When mixed with sand and other ingredients, it is extensively used for roofing houses and making sidewalks in cities.

*Borax.*—The most extensive borax deposits in the world are in California. The chief supply is obtained from the bottom of a small lake in Lake county.

*Cement*—Of a very good quality and in considerable quantity is obtained at several points in the State.

*Coal.*—Within a few years past coal has been discovered in several parts of the State; but so far the only mines worked to any extent are the mines in Monte Diablo, in Contra Costa county, directly east of San Francisco, and the Coos Bay mines, in Klamath county, near the Oregon State line.

*Copper.*—The principal copper mines of California are located at Copperopolis, Calaveras county. This locality, as well as many others in California, is rich in copper; but, owing to the high price of labor, lack of cheap transportation, and the low prices of copper in foreign markets, these mines have not been renumerative, but, on the contrary, have generally proven disastrous to all engaged in them.

*Cobalt and Nickle.*—These minerals have been found in small quantities in Placer county and in other parts of the State.

*Diamonds.*—In Amadore and other counties, in the western slope of the Sierras, diamonds have been found, but they are rare and of inferior quality. Miners have found them generally in cleaning up their sluices. None of them have the brilliancy of a first-class diamond. A few have been found of fair quality and worth from thirty dollars to sixty dollars each.

*Electro-Silicon.*—This is a chalk-like mineral found in great quantities in El Dorado county and also in the State of Nevada. It is used in cleaning silverware and metals of every description: it imparts a glossy polish and fine burnish to the finest gold and silver. It is the best known article in use for polishing metals, is largely in use in the State, and must eventually find a market in other quarters.

*Gypsum*—Has been discovered in considerable quantities in Los Angeles and Santa Cruz counties.

*Iron.*—Many parts of the State have shown favorable indications of deposits of iron ore; but so far no mine of rich ore has been opened, nor any work done to justify the belief that the State has any iron deposits to equal those of the Atlantic States. Lake, Santa Clara, Butte, Placer, Calaveras, and Sierra counties have shown good indications of iron.

*Lead.*—Lead is abundant on the Pacific coast—Arizona, Nevada, and California having it in great abundance. Santa Catalina island, off the coast of Santa Barbara county, abounds in this mineral. Extensive lead-works at San Francisco receive full supply of ore from various directions on the coast.

*Petroleum.*—Petroleum of an inferior quality has been discovered in many parts of California from the northern to the southern extremity of the State. So far its discovery has been confined to the Coast Range of mountains and to the counties of Kern, Humboldt, Santa Barbara, and Santa Cruz.

*Platinum and Plumbago.*—These minerals are found in many places throughout the State; the former in small quantities only, but the latter in abundance in Mariposa, Calaveras, Tuolumne, and Los Angeles counties.

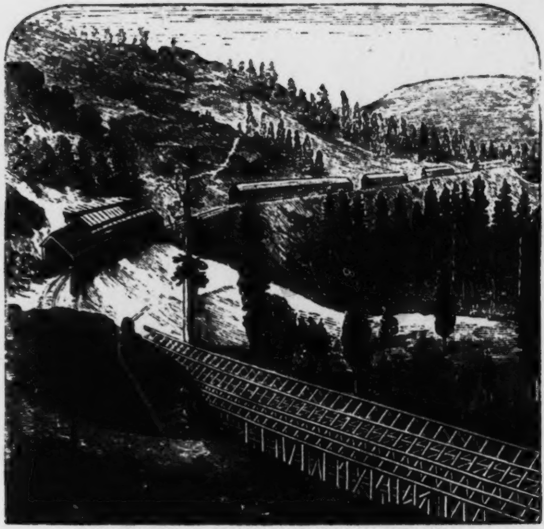
*Quicksilver.*—California produces more quicksilver than any other country in the world. The principal supply is derived from the famous New Almaden mine, in Santa Clara county, about thirteen miles southeast of the town of San José. This mine has been worked constantly since 1850, having produced about forty million pounds since that period, without any signs of decrease in the yield. Beside this mine there are others in the State from which a considerable quantity of quicksilver is obtained—the New Idria, Guadalupe, Redington, and San Juan Bautista. Besides supplying the home market with the large amount of quicksilver used in mining and for other purposes, all the Pacific States and Territories derive their supply from California, and great quantities, shipped annually to Australia, South and Central America, the Atlantic States, Great Britain, China, and Japan, are obtained in these mines.

*Salt.*—There is a good supply of salt in California. In some of the southern counties of the State great deposits are found in the beds of ancient lakes which have been dried up for centuries. In Los Angeles, Alameda, and other counties, large quantities of salt are made by ditching and confining the salt water until solar evaporation carries off the water, leaving a crystal deposit upon the bottom. Alameda county alone produces more than ten thousand tons annually. Great quantities of salt are annually imported into the State from Carmen island and Europe. Immense beds of salt are found in Nevada and Utah, and mountains of excellent salt in Arizona, and Oregon has several valuable salt-springs.

*Sulphur.*—Sulphur of a superior quality is found in great abundance in California, the chief supply being obtained in Lake, Sonoma, and Colusa counties. It has been lately discovered in the counties of Klamath, Kern, Napa, Los Angeles, and Santa Barbara. The powder works in the State receive their supply in the State.

*Tin.*—The only tin-mines yet discovered in the United States are in the southern part of California. The San Jacinto tin company have fifty-three distinct lodes in one small district in San Bernardino county. Many of these lodes are very rich in mineral; but, owing to the low price of tin (forty cents per pound) and the high price of labor, work has been suspended after the company having produced many tons of a superior article of tin. There are also tin-mines in Los Angeles and San Diego counties and other portions of

HYDRAULIC MINING, CALIFORNIA.
(202 miles from San Francisco.)



SNOW-SHEDS, SIERRA NEVADA MOUNTAINS.
(229 miles from San Francisco—Altitude 5,854 feet.)

the southern part of the State. The first development of tin in the State was in 1868.

*Marble and Granite.*—Marble and granite of good quality is found in many parts of the State. The chief granite quarries are in Sacramento county, at the town of Folsom. Marble of good quality and different varieties is found in Plumas, El Dorado, Tuolumne, Butte, Salano, Amadore, and Placer counties. The greater part of the marble, however, used in the State is imported direct from Italy.

CAVES.—Among the natural wonders of California, the Alabaster cave of El Dorado stands prominent. This cave, which is the only one of note in the State, was discovered in April, 1860. The cave consists of a number of chambers or rooms, the main entrance to which is a tunnel-like aperture in the side of a mountain of white limestone. The interior of this cave is beautiful beyond description, and consists of a series of chambers of various sizes, shapes, and colors. The first chamber reached on entering is about twenty-five feet in length and seventeen feet in width, varying from five to twelve feet in height. Passing through this apartment, the *Dungeon of Enchantment* is reached—a chamber of one hundred and twenty feet in length and seventy feet in width, and from five to twenty feet in height. Here the luxuriant and exquisite decoration of nature strikes the vision of the beholder. Pendent from roof and walls are beautiful stalactites in every variety of form and shade of color, from bright coral to milk-white, most exquisitely wrought by the hand of nature into the most fantastic foliage and charming crystallizations, representing trees, plants, flowers, and leaves, casting their shadows and brilliant contrasts of light and shade, which sparkle and glisten like stars in a clear sky or diamonds in fleecy robes of ermine. Passing from this apartment, the throne upon which is seated nature's grandest effort is reached. Here Grecian, Roman, and Italian art pales, and the royal pomp and tinsel of the Vatican fades into stiffness and disorder: no canopy so gorgeous, no pulpit so eloquent as the one from which comes the silent admonition of man's inferiority and Jehovah's omnipotence as proclaimed from the *Crystal Chapel* of this royal apartment, whose exquisite drapery, fleecy festoonings, and silver cords, looped from pillar and dome by the fingers of nature, when illuminated with artificial light, render Alabaster cave a most charming sight.

### MINING LAWS.

By the civil law the primary title to all the precious metals was vested in the Crown. All gold, silver, and precious stones, if in the public domain, belonged to the sovereign, and it was long held that even the precious metals in the lands of individuals were subject to the royal will. In parts of Asia and Europe, all mines of precious metals are worked under the direction of the monarch, whether in public or private lands; in other parts, the government derives a revenue from all mines worked by demanding one-tenth of the product of the mine if worked by the owner, and if the mine is worked by other than the owner, he pays two-tenths—one to the owner and one to the king.

At this day the prevailing opinion is, that all mines of precious metals, wherever situated, are subject to the sovereign, that they are a part of the royal patrimony, and necessary as a source of revenue in times of war. Laws enforcing this doctrine have been passed by many countries of Europe, including Germany, France, and Portugal. According to the laws of England, mines of gold and silver are termed *royal* mines; they are the exclusive property of the crown, and a grant of land from the king will not pass the title of these mines without *specific words divesting the crown of title.* And this doctrine of title to the precious metals is the law of the United States, although no claim has been made by the government of the United States to the precious metals in the lands of individuals, and in all the States and Territories where the precious metals exist the mines have been thrown open to every citizen, without restriction or price, to mine where he pleased. England, too, has adopted this wise policy in reference to Australia, British Columbia, Nova Scotia, and other places.

Within the past few years much anxiety has been felt by persons settled upon the mineral lands in California and other parts of the United States because they could not obtain title to them. These lands were neither offered at public sale nor could they be preëmpted nor entered under the homestead laws of the country; and their occupants were but tenants at sufferance of the United States. In order to relax these oppressive laws and enable the miner to obtain a permanent and complete title to his mine, Congress enacted the following laws, which must stimulate new enterprise in the mineral regions of the whole country:

## THE NATIONAL MINERAL LAND LAW.

[Approved July 26, 1866.]

SEC. 1. *Be it enacted, &c.*, That the mineral lands of the public domain, both surveyed and unsurveyed, are hereby declared to be free and open to exploration and occupation by all citizens of the United States and those who have declared their intention to become citizens, subject to such regulations as may be prescribed by law, and subject also to the local customs or rules of miners in the several mining districts, so far as the same may not be in conflict with the laws of the United States.

SEC. 2. That whenever any person or association of persons claim a vein or lode of quartz, or other rock in place, bearing gold, silver, cinnabar, or copper, having previously occupied and improved the same according to the local customs or rules of miners in the district where the same is situated, and having expended in actual labor and improvements thereon an amount of not less than one thousand dollars, and in regard to whose possession there is no controversy or opposing claim, it shall and may be lawful for said claimant or association of claimants to file in the local land office a diagram of the same, so extended laterally or otherwise as to conform to the local laws, customs, and rules of miners, and to enter such tract and receive a patent therefor, granting such mine, together with the right to follow such vein or lode with its dips, angles, and variations, to any depth, although it may enter the land adjoining, which land adjoining shall be sold subject to this condition.

SEC. 3. That upon the filing of the diagram as provided in the second section of this act, and posting the same in a conspicuous place on the claim, together with a notice of intention to apply for a patent, the Register of the Land Office shall publish a notice of the same in a newspaper published nearest to the location of said claim, and shall also post such notice in his office for the period of ninety days; and after the expiration of said period, if no adverse claim shall have been filed, it shall be the duty of the Surveyor-General, upon application of the party, to survey the premises and make a plat thereof, indorsed with his approval, designating the number and description of the location, the value of the labor and improvements, and the character of the vein exposed; and upon the payment to the proper officer of five dollars per acre, together with the cost of such survey, plat, and notice, and giving satisfactory evidence that said diagram and notice have been posted on the claim during said period of ninety days, the Register of the Land Office shall transmit to the General Land Office said plat, survey, and description, and a patent shall issue for the same thereupon. But said plat, survey, or description shall in no case cover more than one vein or lode, and no patent shall issue for more than one vein or lode, which shall be expressed in the patent issued.

SEC. 4. That when such location and entry of a mine shall be upon unsurveyed land it shall and may be lawful, after the extension thereto of the public surveys, to adjust the surveys to the limits of the premises according to the location and possession and plat aforesaid; and the Surveyor-General may, in extending the surveys, vary the same from a rectangular form to suit the circumstances of the country and the local rules, laws, and customs of miners: *Provided,* That no location hereafter made shall exceed two hundred feet in length along the vein for each locator, with an additional claim for discovery to the discoverer of the lode, with the right to follow such vein to any depth, with all its dips, variations, and angles, together with a reasonable quantity of surface for the convenient working of the same, as fixed by local rules; *And provided further,* That no person may make more than one location on the same lode, and not more than three thousand feet shall be taken in any one claim by any association of persons.

SEC. 5. That, as a further condition of sale, in the absence of necessary legislation by Congress, the local Legislature of any State or Territory may provide rules for working mines involving easements, drainage, and other necessary means to their complete development; and those conditions shall be fully expressed in the patent.

SEC. 6. That whenever any adverse claimants to any mine located and claimed as aforesaid shall appear before the approval of the survey, as provided in the third section of this act, all proceedings shall be stayed until a final settlement and adjudication in the Courts of competent jurisdiction of the rights of possession to such claim, when a patent may issue as in other cases

SEC. 7. That the President of the United States be and is hereby authorized to establish additional land districts, and to appoint the necessary officers under existing laws, whenever he may deem the same necessary for the public convenience in executing the provisions of this act.

SEC. 8. That the right of way for the construction of highways over public lands, not reserved for public uses, is hereby granted.

SEC. 9. That whenever, by priority of possession, rights to the use of water for mining, agricultural, manufacturing, or other purposes, have vested and accrued, and the same are recognized and acknowledged by the local customs, laws, and the decisions of courts, the possessors and owners of such vested rights shall be maintained and protected in the same; and the right of way for the construction of ditches and canals for the purpose aforesaid is hereby acknowledged and confirmed: *Provided, however,* That whenever, after the passage of this act, any person or persons shall, in the construction of any ditch or canal, injure or damage the possession of any settler on the public domain, the party committing such injury or damage shall be liable to the party injured for such injury or damage.

SEC. 10. That whenever, prior to the passage of this act, upon the lands heretofore designated as mineral land, which have been excluded from survey and sale, there have been homesteads made by citizens of the United States, or persons who have declared their intention to become citizens, which homesteads have been made, improved, and used for agricultural purposes, and upon which there have been no valuable mines of gold, silver, cinnabar, or copper discovered, and which are properly agricultural lands, the said settlers or owners of such homesteads shall have a right of preëmption thereto, and shall be entitled to purchase the same at the price of one dollar and twenty-five cents per acre, and in quantity not to exceed one hundred and sixty acres; or said parties may avail themselves of the provisions of the act of Congress, approved May 20, 1862, entitled "An act to secure homesteads to actual settlers on the public domain," and acts amendatory thereof.

SEC. 11. That upon the survey of the lands aforesaid, the Secretary of the Interior may designate and set apart such portions of the said lands as are clearly agricultural lands, which lands shall thereafter be subject to preëmption and sale as other public lands of the United States, and subject to all the laws and regulations applicable to the same.

The manner of acquiring title to and possession of the mines of California and other parts of the country has been very simple. On the miner discovering a location that presented inducements sufficient to warrant labor he measured off a "claim." If no "district" had already been formed, a meeting of the miners "in camp" was called and a recorder elected, whose business it was to reside in the vicinity and keep a book in which he would make a record of all mines "located" in the district. At this meeting the size of the claim to be held, the amount of labor to be performed in order to hold the mine, and all other rules necessary to the mining interests of the district were passed; and these, if not in violation of statute law, or the Constitution of the State, were recognized as *law* in each mining district, and courts acted upon and recognized them as binding upon all concerned. When a claim was located, a written notice would be posted on one corner upon a stake driven in the ground; this notice giving the name of the owner or owners, with the size and courses of the claim, and the "laws" of the district gave the miner title to either work or sell his claim.

Titles under these regulations have constituted the sole right to all the mines in the States and Territories of the Pacific coast prior to the act of Congress of 1866; and, as comparatively few have sought title to their mines under this act, the great body of mines in the country are held, worked, and sold under these primitive laws of the miners. In all the States and Territories the Legislatures have enacted laws in harmony with the interests of the miners, and conforming as nigh as possible to the general features of the mining rules and prevailing custom of the miners.

Through the mining regions of the country agriculture and every other branch of industry is subordinate to mining: mills, dwellings, streets, churches, factories, orchards, gardens, wheat-fields, and even the graveyard, are invaded by the shovel, pick, and sluice of the miner, custom and law recognizing his right to pursue the precious metals wherever he can find them on the public domain, being responsible only for actual damages to individual property.

In conformity with the liberal institutions of the United States, the government has from the earliest period thrown open her mineral lands to the free and unrestricted use of all persons residing in the country, without exacting a fee, royalty, or tax of any description; but, in the law of 1866, it is provided that *citizens only*, or persons having made a declaration of intention of citizenship, can obtain a *fee simple* title to mines.

Many of the States and Territories, regardless of the title of the United States to the mines within their limits, have enacted laws taxing aliens employed in mining either on their own account or for others. A statute of California imposed a tax of four dollars per month upon each alien engaged in mining for gold or silver in the State. The law, however, was not generally enforced, except upon the Chinese, great numbers of whom are engaged in working over the mines long since deserted by the whites. Generally, throughout all the States and Territories, any white man could work the mines without molestation or tax. In some mining districts of California, and other parts of the Pacific coast, there were laws prohibiting aliens from holding mines in their own names; but such instances were rare, and were intended to discourage Chinese miners only.

The recent amendments to the Federal Constitution, and the laws of the National Congress declaring and guaranteeing to *every person* residing in the republic, regardless of birthplace or nationality, equal rights before and equal protection of the laws, have rendered void the State and mining-district laws imposing a tax upon or prohibiting any class of persons from any of the rights or privileges enjoyed by others; and, in 1870, put an end to the collection of the foreign miners' tax in all parts of the country. The laws of most countries prohibit aliens from mining except by license or permit from constituted authority, and few, if any, nations in the world will permit an alien to obtain a *fee simple* to mineral lands. A royal decree of the King of Spain, published in the year 1783, and still in force in the republic of Mexico, contains the following clause:

> "CHAPTER VII, SECTION 1. To all the subjects in my dominions, both in Spain and the Indies, of whatever rank and condition they may be, I grant the mines of every species of metal, under the conditions already stated or that shall be expressed hereafter; but I prohibit foreigners from acquiring or working mines as their own property in these my dominions, unless they be naturalized or tolerated therein by my express royal license."

As an illustration of the decline of mining in the interior, and of the growing disinclination to collect a mining tax, even of the Chinese miners, the amount of taxes collected during the past few years will serve. The amount of foreign miners' license collected, during the year 1868, in California, was $60,443; while the amount collected in 1869 was but $11,840.20: but a trifle over one-fifth of the amount collected in the preceding year.

## PHYSICAL STRUCTURE.

The physical structure of California clearly indicates the volcanic origin of the Sierras; and the great mineral-producing belt, stretching from Cape Horn to Behring strait, and the sudden eruptions in the Andes, Hawaiian islands, Iceland's Geysers, and Mount Hood, demonstrate that the interior forces which pushed up Mount Shasta, and elevated the Sierras from mother earth's bosom, still have an existence. The treasure of Peru, Chili, Central America, Mexico, Colorado, Arizona, Nevada, California, Oregon, Idaho, Montana, Washington Territory, British Columbia, and Alaska, all belong to the great mother vein whose rich mineral deposits of gold and silver give more mineral wealth than all the rest of the world.

In California, the gold and silver producing range is chiefly confined to the Sierras, which, on their eastern side, throw out the immense silver wealth of Nevada, and, upon their western slope, hold in their stern granite embrace the gold of California. The Coast Range, extending the length of the State, and forming a chain along the sea-coast of from eight to twenty miles in width, possesses none of the precious metals, except in a few places where detached portions of the Sierras have been carried toward the west, or where spurs of this chain push down to the sea, as they do in Del Norte and San Diego counties. But, although the precious metals are not found in the Coast Range to any great extent, other minerals of value are found there in great abundance—coal, copper, tin, quicksilver, lead, asphaltum, borax, sulphur, salt, alum, arsenic, antimony, gypsum, epsom salts, petroleum, soda, and many others.

The valley formation of California consists of a deep loam and sand, with but little clay. In portions of the valleys a black, tough adobe soil is found: it is very productive, but being generally in low places, where the water stands until late in the spring, it is either too

UNITED STATES MAIL SERVICE IN THE SIERRA NEVADA MOUNTAINS.

wet for cultivation or, when the waters leave it, bakes and cracks with the heat of the sun. Through portions of the low foot-hills tough clay is found; in other portions of the foot-hills, sandy and gravelly ridges of little value. But the greater part of the foot-hills and the slopes of the Sierras are fit for cultivation, and contain the best grape and fruit lands in the State. Along the chief rivers, bays, and sloughs of the State, vast areas are overflowed with salt water, or with the water from rivers and interior lakes; and, toward the southeastern portion of the State, the beds of ancient lakes, sandy and alkaline deserts, occupy a considerable space.

# CHAPTER XXII.

Climate—Seasons—Heat and cold—Winter in the Sierras—Trade-winds—Animal vitality—Summer in the Sierras and valleys—Rain-fall compared with other parts of the world—Flowers of the valleys—Spring-time—Wheat-fields—Agriculture—Harvesting—Planting and sowing—Volunteer crops—Straw-burning—Storms and hurricanes—Sand storms.

## CLIMATE AND SEASONS.

No State in the Union nor country in the world possesses such diversity of climate as California. Within her limits can be found the genial rays of the tropical sun, the fogs and damps of England, and the eternal snows of the Alps, with every shade and degree of temperature between these degrees blended into each other and extending their duration through every month in the year. Throughout the vast agricultural valleys and Coast Range regions the climate is most genial: frost and snow are rarely seen, and time seems to pass in the uninterrupted course of protracted summer. Autumn may bring its golden harvest, winter its refreshing showers, spring its verdure, and summer its heat; but all these are so blended and portions of each season carried into the others that it may be said that, with the exception of the Sierra mountains, the climate of California is perpetual summer. Wheat-fields green in January, in head in March, and ripe in June; vegetables growing every day in the year; new potatoes in February and strawberries in March; tender lambs gambolling upon the sward in December and January; and sheep-shearing in February and March, may indicate the genial climate of a land whose clear sky, invigorating atmosphere, and hearty, genial people are never forgotten by those who have ever lived in the country—a region always to be spoken of as the *beautiful sunny land*, whose gorgeous verdure, rich soil, variegated forests, unsurpassed productiveness, and joyous crystal streams whose dimpled currents are never congealed by the pinching frosts of winter, render California a land most desirable for the abode of man.

California beyond doubt is the favorite spot of earth, where nature has dealt her bounties with most lavish hand to proclaim her supreme power and adorn most luxuriantly her footstool—a land whose wheat-fields of June, clustering grapes of October, and orange groves of February are presided over by the gentle *Ceres*, who, no longer dreading the abduction of her daughter, the fair *Proserpine*, by the ungallant *Pluto*, has chosen her terrestrial abode in the sunny land of California.

The climate of California may be divided into three classes: that of the Coast Range, of the interior valleys, and of the Sierras. The climate of the coast and about San Francisco is perhaps the most evenly tempered in the world—cool, invigorating, and embracing. This evenness of climate and temperature extends the whole length of the State, with but little variation during the year. At San Francisco, which locality can be taken as indicating the average of the coast temperature, the average of winter is 52°, and of summer 64°, and the annual average about 56°. The lowest point reached at San Francisco during the past twenty-one years was in January, 1864, when the thermometer descended to 25° at the coldest time during the twenty-four hours, and stood at 37° at noon on the same occasion. During the same period (twenty-one years) the hottest days were on the 10th and 11th of September, 1852, when the thermometer indicated 97° and 98°. Other hot days have been experienced at San Francisco, but none to equal the time mentioned in 1852. In July, 1855, the thermometer reached 90°, and in October, 1864, and September, 1865, reached 91°. The next highest point was reached on the 6th of July, 1867, when the thermometer indicated 93°. Such extremes are very rare, as well as the extreme of the mercury falling below the freezing point at or south of San Francisco. Indeed, at and south of this point, the climate may be termed perpetual summer; flower gardens, shrubs, and grass being as verdant and fragrant in January as in June.

The seasons in California seem to be the reverse of the seasons in any other part of the world. December, at which time the rains have fully set in and the season when winter develops its severity in most parts of the world, and the succeeding months until May are termed winter, or the "rainy season," in California. About the middle of November the rains begin to fall in the valleys, and the Sierras receive their new fleecy robes of winter, the skirts of which grow thin and ragged as they reach down the western foot-hills of the Sierra range, until they entirely disappear at the edge of the green sward, where under the same sun, and in the same latitude and longitude, the icicle and the honeysuckle struggle for the mastery—where the cold fingers of winter pinch the blooming cheeks of spring. During this period, and while the tall pines groan under their burden of snow, and the fierce gales sweep over the jagged peaks of the Sierras, and the miner seeks the shelter of his log-cabin, makes his tedious journey up the mountain sides with his broad snow-shoes, or, with sledded feet, sweeps down the crusted glade, in the valley below the farmer guides the plow, tender shoots of buds and grass welcome the refreshing showers, and waving fields of grain, blossoms, spreading trees, and warbling birds proclaim the presence of spring. Through the winter months, or rainy season, farmers put in all their seed: wheat, barley, and oats are sown from November to May, but the greater part of the grain is sown before the end of February; generally the early sown grain produces the most abundant harvests, and grain sown in November and December requires but about one-half of the seed of that sown later in the season.

California during the rainy season is exempt from the prevailing summer winds which sweep in from the Pacific ocean, and the whole country west of the Sierras and to the ocean is mantled in green. It must not be understood that it rains *all* the time during the rainy season: on the contrary, the weather is very fine, not raining more than one day out of four, and a great portion of the time the sun shines bright, the air is balmy, and altogether the weather is beautiful; and what seems most strange is, that the rain falls generally at night. Throughout this season the air is so balmy that men work in the fields and in shops and stores in their shirt-sleeves, and throughout the whole State, with the exception of the Sierra range, in winter the doors of stores and other buildings are never closed, and in many instances the whole fronts of establishments are open and goods displayed in great profusion, giving an oriental aspect to the business marts of the country.

Once or twice during each winter, ice, the thickness of window-glass, forms at and about San Francisco, and white frost is often visible; but persons who do not rise early may live a lifetime in California without seeing ice, frost, or snow, unless the snowy caps of the mountains are visible.

Winter even in its intensest form in California is not severe, and even the dreaded Sierras, which have been the theme of unguarded writers, and represented as a chain of relentless icebergs, are mild in comparison with the winters of New York, New England, and Canada: the severest weather of midwinter is not so cold in the Sierras as the weather of the early part of the month of March in New York.

Snow falls to a great depth on the Sierras—from three to thirty feet; but much of the lowlands and valleys of this range receive but little snow, and cattle in some instances live in the mountains the year round without the aid of man.

The area of California is so great and the climate so diversified at the different localities, even at the same season of the year, that a few hours travel at any time will carry a person into a variety of climates. For a distance interiorwards of fifty miles from the ocean, along the length of the State, it is damp and cool, with high winds during the entire summer months. During the latter part of each day during this season (June, July, August, September, and October) immense clouds and banks of fog roll up from the Pacific ocean before a stiff westerly breeze, keeping every thing in the tier of coast counties damp and their population clad in warm garments; while the interior valley counties are parched, and their inhabitants, in thin linen, are stewing in fretful unrest and perspiration.

In the interior valley counties hay is cut in May and grain in June; while in the Coast Range, owing to the cold prevailing northwest winds and the fogs, hay is not cut until June and July, and the grain crop is from two to five weeks later than in the interior. It is these prevailing winds and fogs passing through the Golden Gate and breaking over the city of San Francisco that keep the inhabitants of that city through the summer months clad in heavy woollens and furs, and their throats and lungs irritated with severe colds, while they struggle amidst whirlwinds thick with dust and fog.

The prevailing or trade-winds of the coast generally begin to be felt in June and continue until October. During this period it is generally calm through the nights and until the middle of the day; at about noon the winds set in strong, and from that time until sunset it blows a gale; with the setting of the sun it grows calm again, and continues so until the late forenoon of the following day.

During the dry season, and while the entire coast-line for from ten to thirty miles interiorwards is enveloped in fog and bathed in mist, the climate of the interior valleys is intensely dry and hot. In the San Joaquin, Sacramento, Santa Clara, Sonoma, and Napa valleys, neither the fogs nor the prevailing winds of the Coast Range are felt.

Throughout the long summer, while the population of the Coast Range lives amidst fleeting clouds of fog that sweep across and often obscure the sun, inside the fog range, through the great interior valleys and up into the foot-hills of the Sierras, the sun pours down his rays in uninterrupted golden floods, parching the earth, which, for six months—from May to November—does not receive a drop of rain, nor even does a cloud obscure the sun for a moment, which, through all the long days of summer, from early morning until the close of day, sweeps like a flame of fire across the horizon. So great is the heat that, during the middle of each day, vegetation is as if scorched, and droops, limber and wilted; but with the setting of the sun the air becomes cool, and the night, which is almost cold, brings with it copious dews, which invigorate vegetation and refresh all animate life, so that the coolness of the nights counteracts the great heat of the day; and, although the thermometer stands often at 80°, 100°, and even 120°, in the shade, and the air is so hot that it seems to burn the lungs and throat in inhaling it, yet neither man nor beast seems to be oppressed nor to relax their vigor, but each performs his labor with unabated vitality. Cattle and horses taken from the plow are not jaded and panting with fatigue, and a California horse under the saddle will carry his rider eighty, a hundred, and even a hundred and twenty miles in a day, often over a rough country, and continue his journey at these rates of speed for many days in succession.

However hot the air, it is not oppressive, and men working in the mines, gulches, and fields under a scorching sun do not experience fatigue; and there being no such thing as a hot night known in California, none of the inconveniences of hot weather, such as are experienced in other quarters, are felt here.

The cool nights, bracing atmosphere, genial climate, nourishing food, and pure water of California infuse a physical vitality into all animate nature not equalled on any other part of the globe: beyond all question man and beast, the year through, possess from twenty-five to fifty per cent. more motive power than is possessed by man or beast elsewhere.

Disease among horses and cattle is almost unknown in California, and few of the complaints that cripple and render horses useless in other countries are ever seen here: ringbone and spavin are unheard of, and a sickly, thin horse is a thing rarely to be met with. On the contrary, horses are healthy, well-knit, and muscular, with great spirit and vitality. The fleet-footed Spanish or half-breed horse of California, with muscle of iron, foaming mouth, dilating nostril, and flaming eye, is the pride of the horseman.

Winter in the Sierras has already been described. But the reader must not suppose that summer does not smile in these aerial regions: here to the beauties of the climate of the valleys are added dense forests, luxuriant foliage, green meadows, and crystal streams. By the first of May, the snows have disappeared from the whole range except a few patches high up among the rocky peaks and in the deep clefts on the northern slope of the mountains. The air is balmy, mild, and refreshing. As summer passes and the valleys below are parched, these mountains still retain their verdure, and through the long, hot summers of the valleys the Sierras are green, their forests musical with singing birds, and their lakes and natural wonders the resort of thousands of the pleasure-seeking inhabitants of the dusty plains.

The Sierras are by no means a rocky and sterile waste: their lofty granite domes and scarred precipitous walls are uninviting as the home of man; but a great portion of this range consists of rich valleys and rolling hills, where meadows, waving fields of grain, and luxuriant grapes and fruits surround the many happy homes, whose prosperity attests the value of the Sierras as a future place of permanent abode. Rich meadows of great extent are nestled in among the mountains of the Sierra range, and great quantities of natural hay are annually cut. The wide pasture-range of the Sierras serves as a most welcome retreat to the famished cattle and sheep of the dusty valleys, which in great numbers are driven up from the parched plains during the summer months.

As the heat of summer differs in different parts of the State, so the rainfall is graduated, and differs in extent, decreasing in regular order from north to south, only about one-half as much rain falling at San Diego as at San Francisco, and about half as much at San Francisco as at Humboldt. The annual rainfall at San Diego is ten and a-half inches; at Monterey, twelve inches; while at San Francisco it is twenty-one and a-half inches; Humboldt, thirty-four and a-half inches; at Astoria, Oregon, it is eighty-six and a-half inches; Steilacoom, Washington Territory, fifty-two inches; and at Sitka, ninety inches. This latter is perhaps as large an average rainfall as is found in any part of the world. There are points in the interior of California where as high as one hundred and forty inches have fallen in a single year, but of course the average is much less. The annual rainfall at Sacramento is eighteen and a-quarter inches; at Benicia, twenty-three inches; at Stockton, sixteen inches. The smallest rainfall in the State of California, if not in the United States, is at Fort Yuma, on the western bank of the Colorado, and in the extreme southeastern corner of the State: three and a-quarter inches is the average annual fall at this point.

A comparison between the rainfall of California and other parts of the world may be interesting to the reader. At Cincinnati the annual fall is eighty-six and a-quarter inches; Bordeaux, thirty-four inches; Madeira, thirty nine inches; Liverpool, thirty-four inches; Paris, twenty-two and a-half inches; Rome, thirty-one inches; Portland, Maine, forty-five and a-quarter inches; New York city, forty-three and a-half inches; St. Louis, forty-two inches; New Orleans, fifty-one inches; Portsmouth, N. H., thirty-six inches; Boston, Mass., thirty-five inches; Newport, R. I., fifty-two inches; Fort Pike, La., seventy-two inches; Vancouver, Washington Territory, forty-five inches; Fort Conrad, New Mexico, six and three-quarter inches.

It will be seen from the figures here given that the rainfall of California is less than one-half of the average fall of the Atlantic States, and one-third less than the average fall of the great wine-producing regions of Europe; about equal to that of Paris, and less than Liverpool and Rome; and Oregon, noted for its rainy winters, averages only about as much as the central portion of the Atlantic States.

The following table will show the annual rainfall at San Francisco for each year during the past twenty-three years, and the fall of each *rainy season:*

| SEASON. | RAIN. | YEAR. | RAIN. |
|---|---|---|---|
| 1849–50, | 33.10 | 1849, | 18.00 |
| 1850–51, | 7.18 | 1850, | 2.30 |
| 1851–52, | 19.25 | 1851, | 15.12 |
| 1852–53, | 33.20 | 1852, | 25.60 |
| 1853–54, | 23.87 | 1853, | 19.03 |
| 1854–55, | 23.68 | 1854, | 22.12 |
| 1855–56, | 21.66 | 1855, | 27.80 |
| 1856–57, | 19.88 | 1856, | 22.01 |

| SEASON. | RAIN. | YEAR. | RAIN. |
|---|---|---|---|
| 1857–58, | 21.81 | 1857, | 20.55 |
| 1858–59, | 22.22 | 1858, | 19.64 |
| 1859–60, | 22.27 | 1859, | 18.03 |
| 1860–61, | 19.72 | 1860, | 16.15 |
| 1861–62, | 49.27 | 1861, | 18.43 |
| 1862–63, | 13.62 | 1862, | 28.29 |
| 1863–64, | 10.08 | 1863, | 16.68 |
| 1864–65, | 24.73 | 1864, | 18.55 |
| 1865–66, | 22.93 | 1865, | 10.50 |
| 1866–67, | 33.84 | 1866, | 32.98 |
| 1867–68, | 40.05 | 1867, | 33.00 |
| 1868–69, | 21.06 | 1868, | 28.23 |
| 1869–70, | 20.08 | 1869, | 23.18 |
| 1870–71, | 14.47 | 1870, | 15.57 |
| 1871–72, | 27.09 | 1871, | 23.12 |

Within the limits of California almost every degree of temperature and climate can be found. A few hours ride from San Francisco, in winter, will bring the traveller from blooming beds of flowers into the midst of mountains of snow; so, in summer, two hours travel will lead you from the strong, cool, bracing winds and dense fogs of the coast line into the intense heat of the valleys, and a few hours later you can bathe your temples in the snows of the Sierras and the icy waters of Lake Tahoe; or, travelling south, you will reach the alkaline flats of Death valley, and the burning sands of Fort Yuma—the hottest spot on the American continent, if not the hottest in the world, where the average annual temperature is 73° in the shade, the thermometer often standing 120° in the shade for a month at a time.

The evenness of the temperature of California as a whole is unsurpassed on the globe, except in one or two instances; and the mean temperature of San Francisco shows a climate varying but two degrees on an average of the twelve months of the year—the average of January being 49°, and of June 56°, the annual average being 54°. Fort Yuma, at the junction of the Gila and Colorado rivers, has a temperature in June of 87°, and in January of 56°, and an annual temperature of 73°; Sacramento has a temperature in June of 71°, and in January of 45°, with an annual temperature of 59°.

Steilacoom, Washington Territory, has a temperature in June of 60°, and of 38° in January, and an annual temperature of 50°; the city of Mexico has a temperature in June of 65°, and in January of 52°, and an annual temperature of 60°; New York, 67° in June, and 31° in January, and an annual temperature of 51°; New Orleans, 81° in June, and 55° in January, and an annual temperature of 69°; Honolulu, 77° in June, 71° in January, and an annual temperature of 75°; London, 58° in June, 37° in January, and an annual temperature of 49°; Naples, 70° in June, 46° in January, and an annual temperature of 60°; Funchal, 67° in June, 60° in January, and an annual temperature of 65°; Canton, 81° in June, 52° in January, and an annual temperature of 69°; Nagaski, 77° in June, 43° in January, and an annual temperature of 62°; Jerusalem, 71° in June, 47° in January, and an annual temperature of 62°.

It will be observed that the climate of California resembles closely the favored lands of the olive, the fig, and the orange; and that the climate of San Francisco approaches regularity the year round, with greater similarity than any place named except Honolulu and Funchal, and that Naples itself is surpassed by the beautiful regular climate of the great interior valleys of California, which, up to the fortieth parallel, (the southern line of Humboldt county,) has the annual average

(60°) of Asia Minor, Central Italy, Spain, and Northern Syria; while the southern limit of the State, in the vicinity of San Diego and in the direction of the Colorado and Gila, has the mean annual temperature of Cairo (70°) and the northern portion of Africa; and in portions of the San Joaquin valley, Death valley, and the sandy deserts of the southern side of San Bernardino county, adjoining Arizona Territory, we have the summer climate of the Great Desert of Sahara.

California, in the early part of May, is the loveliest spot on earth: the deep rich soil of the valleys and the sides of the hills, as far as the eye can reach, wave with luxuriant wheat, barley, and oats bursting into head; while all the untilled land—valley, hills, and even the steep mountain sides—are covered with wild oats, and variegated flowers of every tint and hue, pink and orange being the predominant colors. Hundreds of thousands of acres, bedecked in the charming robes of spring, whose golden fleece is unbroken by a single tree, rock, or other obstruction, roll in seeming undulating waves until their outlines are lost in the distance.

It was over these charming valleys—a terrestrial paradise—that the eye of the pious missionary father wandered, as the tattooed aborigines lazily wended their way from their mountain homes to the foot of the cross. Here the vaquero coursed upon his fleet steed, as he circled the countless herds, ere the invading hand of agriculture turned the furrow, or the husbandman broke the primitive order of nature.

California is eminently a land of flowers, and if the invasion of civilization has broken the natural beauty of the vast valleys and rolling hills by the uniformity of wheat-fields, vineyards, orchards, and flower-gardens, it has introduced scientific industry, refinement, and happy homes, whose intelligent occupants subdue the sterile sand-hills of San Francisco and the arid plains of the interior, where the domestic comforts of home are in strong contrast with the pastoral semi-barbarous lives of the early Spanish settlers of the country, and the perpetual bloom of the rose, lily, and honeysuckle, so abundant every month in the year, will compensate for the partial loss of the wild flowers of the vale.

May is the most charming month in the year in California: the last showers of spring invigorate vegetation; wheat is in head, orchards in bloom, every thing green, bright, and clean; haying is vigorously prosecuted. By the end of May the wild flowers disappear, and June ushers in harvest, with rustling fields of wheat. At this time grass and flowers are all dried up, and the whole face of the country wears a browned and parched appearance except the oaks, orchards, and vineyards, which latter retain their verdure until November. The grass, which during the dry season seems parched, retains all its strength, and instead of being dead is only cured by the sun, affording nutritious pasturage until the fall rains destroy it and start the new grass.

The great wheat-crop of California, in some instances consisting of ten thousand acres in a single field, is cut with reapers of the most approved style. Some of these machines clip only the heads off the field, leaving the body of the straw standing: the grain in this form is carried directly to the thresher, which is located in the open field; here it is threshed, and put in sacks of about two hundred pounds each. The long-continued dry season has thoroughly dried the grain on foot, so that it is ready for the mill, or for shipment in bulk or sacks on shipboard to any part of the world. The grain once in sacks, it is piled in great heaps upon the open field, where it may remain secure from a drop of rain until November; or, if it is transported to shipping points, it is piled up in great heaps upon the piers and wharves until it is shipped. So dry is the grain that it can be taken directly from the thresher and shipped to Liverpool, China, or Australia without sustaining any damage, and the mills in many instances have to dampen it before they can grind it into flour. A peculiarity of the wheat of California is, that however ripe or long it stands in the field it does not shell: the little capsule which holds the kernel being strong, and not opened by rain or any change in the weather.

In ordinary seasons enough grain shells in the handling to make seed; and, should the ground remain unploughed, the rains of winter will beat the grains into the mellow earth, and in a short time a spontaneous crop will spring up: thus good harvests of grain are often obtained for two or three seasons without either ploughing or sowing. But sowing every year, with deep ploughing and summer fallowing, as in other countries, produces the best crops.

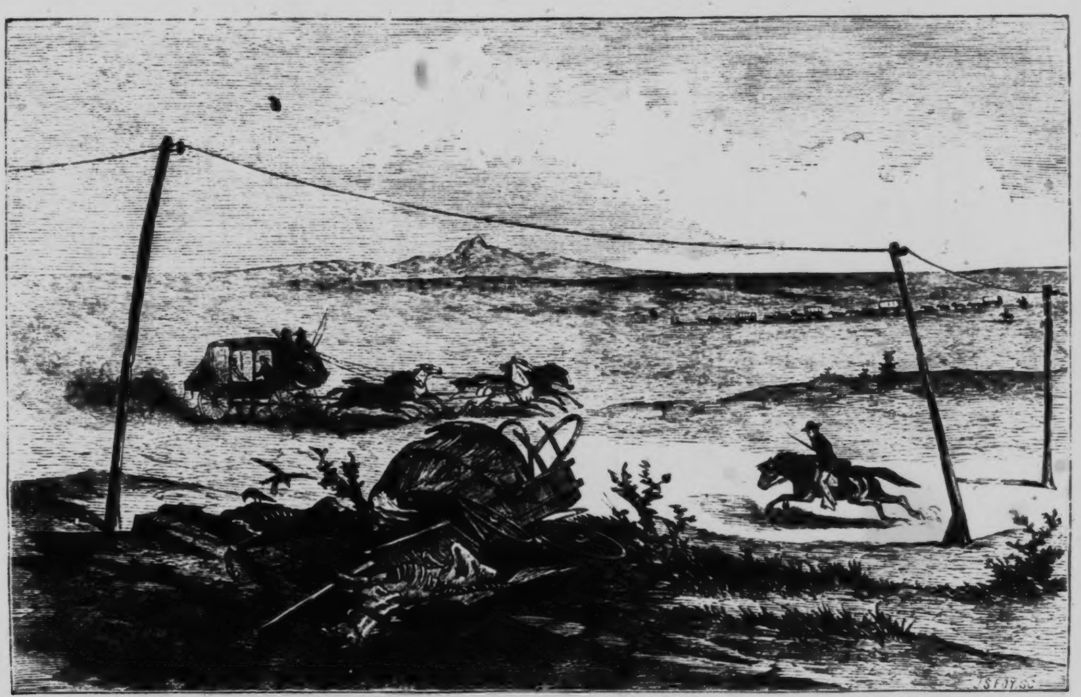
As horses, cattle, and sheep live out in the open fields during the entire winter or rainy season, there is no attention paid to saving straw or fodder of any kind, except for the towns and cities; so that the custom of farmers all over the State and in Oregon is, to burn the straw upon the field, and during the fall months vast fires can be seen consuming the piles of straw where the thresher stood, or sweeping the tall stubble from the field.

Farmers, however, are now beginning to learn the folly of consuming what, in seasons of protracted drought, and during the long and sometimes cold rains of winter, might save their stock from destruction, and are abandoning the burning of their straw, collecting it into vast piles and stacks, and in some instances erecting sheds over it. Here, secure from rain or from the scorching heat of summer, cattle will collect and feed freely. As the pasturage range is circumscribed by fencing and cultivation, the necessity of preserving every spear of fodder will press itself upon the intelligent farmer until the folly of straw-burning will be entirely abandoned.

Storms are very rare on the Pacific coast, and such hurricanes as sweep over the Atlantic States and portions of Europe are unknown. Occasionally a stiff northwest breeze is felt along the coast line, and the usually tranquil waters of the deep Pacific lash with great fury upon the coast. But the interior of the whole country, through each month of the year, is calm. Along the Coast Range, fir trees, three hundred feet in height, toss their lofty heads without the loss of a limb, half-decayed trees stand upon their frail pedestals, and tenements of light boards are unmoved. Fitful gusts, gales, thunder, and hail-storms are unknown.

During the spring and summer months occasional claps of thunder may be heard in the Sierra range; but at San Francisco and throughout the body of the State thunder is not heard nor lightning seen more than once in each three or four years, and then but in their feeblest forms.

In the southeastern portion of the State, where vast alkaline and sandy deserts stretch for leagues, what is termed *sand storms* interrupt the traveller and fill the air with clouds of impenetrable dust. These storms are of but short duration, but their violence strikes terror to man and beast; and when the traveller is overtaken by one of these storms, which obscures the sun with volumes of dust, blinds the eyes, and cuts the cheeks with flying sand and gravel, his progress is impossible: all former signs of roads are obliterated, and the only alternative is to come to a halt and with blanket, coat, or shawl wrap head, face, and mouth of man and beast to prevent suffocation, and lie still until the fury of the gale is spent.



CROSSING THE PLAINS: STAGE-COACH—PONY EXPRESS—EMIGRANTS: (BEFORE RAILROADS.)

# CHAPTER XXIII.

Agriculture—Manufactures—Commerce—First agriculture in America—Increase of agriculture in California—Decline of mining—Decay of mining towns—Area of California—Agricultural lands—Spanish grants—Vast estates—How to obtain public lands—School lands—Who may secure the public lands—Grain, fruit, and vegetable growing—Yield of grain per acre—Harvesting—Wild oats—Wild mustard—Hops—Potatoes—Tobacco—Large vegetable growths—Strawberries—Tropical fruits—Oranges, figs, and nuts—The grape—Fertility of the Sierras—Tea culture—Beet sugar—Cotton and rice—Silk culture.

From the earliest history of the human race down to the present time no pursuit or occupation has so materially aided in developing the physical, mental, and moral condition of man as that of agriculture. Commerce has brought with it adventure, deception, opulence, and power: so it has induced craft, dissipation, voluptuousness, and vice. Manufactures have stimulated invention, introduced new and useful commodities, and, in some instances, relieved man from oppressive physical labor: they have also crowded and huddled people together in the unwholesome atmosphere of cities and factories, and enfeebled the race in the pursuit of the tinselled display and allurements of wealth. Art has beautified the abodes of men, spread the broad sails of commerce, and lent a charm to life: so, too, it has induced frivolity, and, when uncontrolled, has fearfully pandered to the vices of the times. Science has gauged the celestial and terrestrial bodies, measured the depths of oceans, the heights of mountains, and the degrees of heat and cold; analyzed the earth, separated and purified metals, traversed continents, subdued the elements, and encircled the globe: but its ever-craving necessities and demands multiply the wants and cares of man, ever pressing new claims and multiplying the wants and labors of the race. All these combined, or in their separate influences, have built and fostered our large cities—commerce, manufacture, art, and science—and our large cities are the nurseries of disease, dissipation, idleness, immorality, crime, folly, fashion, and sin, whose corrupting currents fill the prisons, asylums, and hospitals of the land, and swell from the crowded centres of vice until they trench upon the peaceful home of the agriculturalist, lashing their pestilential foam from dock, garret, cellar, saloon, prison, asylum, and brothel, up to the green fields and producing fountains of the physical supply of the race—the fields of the farmer; and as the physical existence of the population of both country and city depends entirely upon the agricultural regions, so the morality, virtue, and patriotism of the nation rely upon the pure fountains of the rural districts to supply the fast advancing national, social, moral, and physical mortality of the crowded cities of the land.

The ever-changing conditions of man and the vicissitudes of nations, sudden revulsions in trade, and the calamities of war, have fully demonstrated that the surest foundation of individual and national existence and prosperity is agriculture. Without it all else must cease. Man may subsist for a brief period by the chase, but the game and the hunter alike disappear before the invading ploughshare, as is forcibly illustrated in the decline of the aborigines of America.

On the arrival of the Pilgrim Fathers at Plymouth, their scanty stores of provisions were quite exhausted, and the forests seemed to afford but little hope of a supply of game during the approaching winter or the coming spring; and, had it not been for the feeble efforts in agriculture practised by the Indians before the arrival of the *Mayflower*, the whole colony would have perished.

The historian Moore, in describing the efforts of the Pilgrims to penetrate the forest in 1620, says:

> "Here they found a cellar carefully lined with bark, and covered with a heap of sand, in which about four bushels of seed-corn in ears were well secured. After reasoning on the morality of the action, they took as much of the corn as they could carry, intending, when they should find the owners, to pay them their satisfaction. On the third day they arrived, weary and welcome, where the ship lay, and delivered their corn into the common store. The company resolved to keep it for seed, and pay the natives the full value when they should have opportunity. . . The ground was frozen and covered with snow, but the cellars were known by heaps of sand, and the frozen earth was penetrated with their swords till they gathered corn to the amount of ten bushels. This fortunate supply, with a quantity of beans preserved in the same manner, they took on the same conditions as before. . . Six months after, they paid the owners to their satisfaction. The acquisition of this corn they always regarded as a peculiar favor from Divine Providence, without which the colony could not have subsisted."

Lord Chatham, in speaking of the noble pursuit of agriculture, said:

> "Trade increases the wealth and glory of a country; but its real strength and stamina are to be looked for among the cultivators of the land. In their simplicity of life is found the simpleness of virtue, the integrity of courage and freedom. These true, genuine souls of the earth are invincible, and they surround and hem in the mercantile bodies, even if these bodies, which supposition I totally disclaim, could be supposed disaffected to the cause of liberty."

From the period in which Adam was tending a garden, Cain tilling a farm, Abel feeding his flocks, and the dove was hovering over the ark, to the present period, agriculture has been regarded in all lands as the noblest pursuit of man. If England looks to her agricultural regions for physical and moral support in the hour of national danger, and calls for patriotism from a peasantry whose tenure of the soil is subject to the will of a landlord whose mandates of ouster are executed by ejecting wife and child and turning them to the mercies of the poor-house, how much more may a country look to the tillers of the soil for support where every farmer is the absolute owner of the land he cultivates! America does proudly look to her agricultural districts as the great conservator of the moral, physical, and political strength of the nation; and to no portion can either State or nation look with greater confidence than to the rich agricultural regions of California, where the farmer is not confined to fifty or a hundred acres, but looks out upon his broad domain more vast than many of the principalities of Europe, and with a climate, soil, and productiveness unsurpassed on the globe.

With the decline of surface-mining in California came the development of the great agricultural resources of the State, and the explosion of the fallacious notions of the early settlers that California was a barren waste, fit only for the miner or the grazing of flocks. How little did these early adventurers dream of the change soon to be wrought, of the decay of the mines, and the spread of agriculture, whose waving fields of grain, vineyards, orchards, fruits, and flowers so enhance the value and charms of California!

Throughout the western slope of the Sierras, the foot-hills and ridges, where once were enacted the busy scenes of the miner's life, stand marked evidences of the decline of the precious metals. The scarred brows of the mountains, excavations, deep holes, ridges of gravel, abandoned tunnels, dilapidated shanties, saw-mills, ditches, and flumes, with the general debris of abandoned villages and mining-camps, attest the unsubstantial character of mining.

In many portions of the State, where, but a few years ago, towns sprang up as if by magic, and scenes of excitement, business, and revelry lent a wild charm to the busy life of the miner, there is scarcely a sign of life to be seen. The wreck of the miner's tent, scattered fragments of the frail tenement of the gold-hunter, rusty picks, shovels, kettles, and pans attest the decline of the earliest industry of the State. Dwellings that cost many thousand dollars are worthless and stand unoccupied; and the "leading" hotel, once crowded with boarders at a dollar a meal and twenty-five cents for "drinks," where the good-natured miner and "mountain-man" held their midnight orgies, and from which went forth the dulcet strains of the violin, mingled with the bacchanalian shouts of the riotous throng, is now inhabited only by birds and beasts. In the language of California, these early scenes have "dried up." Long since the last door of the hotel has been broken down, and its last pane of glass broken by the idle passer-by. Hogs raise their broods in the basement; horses, mules, and cows seek shelter in the parlors and bar-room; while sheep and goats clatter up the rickety stairs to the "bed-rooms," and owls, hawks, bats, and swallows have undisputed possession of garret, eave, and chimney.

The progress and permanent character of the agricultural regions are strongly contrasted with these scenes. The early abode of the farmer is replaced by one of elegance, comfort, and luxury; waving fields of grain stretch out upon all sides, broken only by the thrifty orchard, the vineyard, and the clustering roses, which lend a sweet charm to the peaceful home where the musical voices of happy children bless the increasing years of fond parents, and the ripening fruits and harvests of a bounteous soil, genial climate, and well-spent industry crown with success the labors of the tiller of the soil.

Each succeeding year more distinctly marks the boundary between the two pursuits of mining and agriculture: the former, steadily on the decline, leaves but a wreck behind, without a shadow of hope for recuperative energy, and those who follow in its seductive allurements generally find their occupation, credit, and home ephemeral in the extreme; while the latter steadily augments the wealth of the State, affords constant employment and permanent homes, cultivating not only the rich valley lands but daily extending its lines toward the Sierras, up the ravines, gulches, and foot-hills, obliterating the old landmarks of the miner, fencing, plowing, planting, and reaping over and around the deserted ditches, sluices, tunnels, and shafts, and up to the summit of the highest mountain ranges. So, too, year after year the agricultural area of the State widens, and the fallacious notions of the early settlers respecting the sterile nature of large portions of the State disappear. The truth is, that there is but a small proportion of the vast area of the State that is not susceptible of cultivation or suited to grazing—not less than *sixty-five million acres being fit for the plow.* (For area, &c., see Chapter XIII.)

The area of California has not yet been ascertained with exactness. This is owing to the fact that the coast line of more than nine hundred miles, following the indentations of the coast, has not yet been exactly surveyed; but the extent of the State as ascertained is 188,981 square miles, or 120,947,840 acres.

Of the agricultural lands of the State, the San Joaquin and Santa Clara valleys form a very important part, but by no means constitute the agricultural lands of California. Rich valleys of various dimensions are found outside these two principal ones all the way from San Diego to Del Norte county; and many of the valleys high up in the Sierras—in Humboldt, Siskiyou, Lassen, and Alpine counties—grow every variety of grains and fruits grown in the central counties of the State, and produce an average of wheat and barley greater than the rich agricultural counties surrounding the Bay of San Francisco.

Spanish Grants.—Throughout the southern and central portions of the State, embracing much of the best agricultural and grazing lands of California, large tracts have been granted by the Spanish and Mexican authorities to individuals. Some of these grants form princely domains, many of them containing from ten to fifty thousand acres, and tracts of the latter size, and even larger, are held by individuals in California at this day.

The boundaries of these early grants were very indefinite, being generally designated by some river, the ocean, or some irregular mountain range never ascertained, as the surveyor's art was unknown in California until after the conquest of the country by the United

States. To ascertain and define the limits and boundaries of these early grants has been a work full of difficulty and perplexity to settlers.

More than three hundred and fifty of these Spanish grants, covering an area of *five and a-quarter million acres*, have been presented to the authorities of the United States for adjustment; and hundreds of fraudulent and irregular grants, covering vast areas, have lingered in tedious litigation through the Federal and State courts, to the great detriment of public interests. The greater portion of this class of claims is now, however, finally settled. Some of the early grants, embracing immense tracts, still remain in the hands of first parties or their children; but most of them have passed into the hands of capitalists or shrewd attorneys, who, at the outlay of a few hundred or thousand dollars, or some trifling legal service, hold princely estates.

The inclination to hold on to these vast tracts is daily growing less, and as the country is becoming settled and railroads span the valleys, owners of the soil exhibit a desire to dispose of their lands at reasonable rates and in tracts suitable for farming purposes.

Lands in California are also held in large tracts by the United States, the State of California, and the railroad companies in the State, there being 100,070,177 acres of unsurveyed United States lands yet (1872) in California.

For the convenience of the public, there are six land offices established by the United States in California—one at each of the following places: San Francisco, Sacramento, Stockton, Marysville, Visalia, and Humboldt, at all of which offices every information respecting the public domain may be obtained free of charge.

For the better information of the reader, the following directions to obtain the public lands are here given:

## PUBLIC LANDS.

### *How to secure the Public Lands under the Preëmption and Homestead Laws.*

DEPARTMENT OF THE INTERIOR,
GENERAL LAND OFFICE, *July* 19, 1865.

Numerous questions having arisen as to the mode of proceeding to purchase public lands, or acquire title to the same by bounty land locations, by preëmptions, or by homestead, this circular is communicated for the information of all concerned.

In order to acquire title to public lands, the following steps must be taken:

1. Application must be made to the register of the district land office in which the land desired may be situated.

A list of all the land offices in the United States is furnished by the department, with the seat of the different offices, where it is the duty of the register and receiver to be in attendance, and give proper facilities and information to persons desirous of obtaining lands.

The minimum price of ordinary public lands is one dollar and twenty-five cents per acre. The even or reserved sections falling within railroad grants are increased to double the minimum price, being two dollars and fifty cents per acre.

Lands once offered at public sale, and not afterwards kept out of market by reservation or otherwise, so as to prevent free competition, *may be entered or located.*

2. By the applicant filing with the register his written application describing the tract, with its area, the register will then certify to the receiver whether the land is vacant, with its price; and when found to be so, the applicant must pay that price per acre, or may locate the same with land-warrant, and thereafter the receiver will give him a "duplicate receipt," which he is required to surrender prior to the delivery to him of the patent, which may be had either by application for it to the register or to the General Land Office.

3. If the tract has not been offered at public sale, it is not liable to ordinary private entry, but may be secured by a party legally qualified, upon his compliance with the requirements of the preëmption laws of 4th September, 1841, and 3d March, 1843; and after

such party shall have made actual settlement for such a length of time as will show he designs it for his permanent home and is acting in good faith, building a house and residing therein, he may proceed to the district land office, establish his preëmption claim according to law by proving his actual residence and cultivation, and showing that he is otherwise within the purview of these acts. Then he can enter the land at one dollar and twenty-five cents, either with cash or with bounty land-warrant, unless the premises should be two dollars and fifty cents per acre lands. In that case the whole purchase money can be paid in cash, or one-half in cash, the residue with a bounty land-warrant.

4. But if parties legally qualified desire to obtain title under the Homestead Act of 20th May, 1862, they can do so on complying with the Department Circular dated 30th October, 1862.

5. The law confines homestead entries to surveyed lands; and although, in certain States and Territories referred to in the original law, preëmptors may go on lands before survey, yet they can only establish their claim after return of survey, but must file their preemption declaration within three months after receipt of official plat, at the local land office where the settlement was made before survey. Where, however, it was made after survey, the claimant must file within three months after date of settlement; and where actual residence and cultivation have been long enough to show that the claimant has made the land his permanent home, he can establish his claim, and pay for the same at any time before the date of the public sale of lands within the range of which his settlement may fall.

6. All unoffered surveyed lands not acquired under preëmption, homestead, or otherwise, under express legal sanction, must be offered at public sale under the President's proclamation, and struck off to the highest bidder, as required by the Act of April 24, 1820.

J. M. EDMUNDS,
*Commissioner General Land Office.*

SCHOOL LANDS.—The State of California obtained by grant from the National Congress six million acres of the public domain in the State; this consists of the sixteenth and thirty-sixth sections in each township.

These lands are mostly disposed of already; still such as are left may be purchased, at one dollar and twenty-five cents per acre, on easy terms. The State Surveyor-General being, *ex officio*, State Locating Agent, all the applicant has to do is to make application to him, where the necessary blanks and all information may be obtained. Citizens of the United States, or those having made their declaration of intention of citizenship, only can obtain these lands.

Besides these lands mentioned, there are millions of acres of good agricultural lands for sale in the State, with respectable offices and agents in every county and town of importance to give information to the purchaser. It is a most difficult task to attempt a description of the quality, value, and price of lands in the State, so much depends upon *location*. Lands in the hands of private owners can be bought all the way from *twenty-five cents to five hundred dollars* per acre. In many portions of the counties adjoining the Bay of San Francisco rich agricultural lands can be bought for from *fifty to one hundred dollars* per acre, and in the wheat-growing regions of the San Joaquin and other valleys good farm-land can be purchased at from five to fifteen dollars per acre, often on very favorable terms.

It must always be borne in mind that when agricultural lands are spoken of in California there is meant a good rich soil, entirely free from rock or trees of any description, and generally every foot being fit for the plow; all the great valleys and rich rolling hills in the State being covered with wild oats and grass, and entirely free from timber, brush, or stones.

WHEAT.—The official report of the Surveyor-General of the State shows that, in 1869, (this year is selected as being a fair average season,) there were 2,343,204 acres under cultivation, 1,286,133 of which were under wheat and 468,076 under barley. This report, as well as the reports of the Agricultural Bureau of Congress for 1869, affords many illustrations of the great productiveness of California over every State of the Union. Besides the superiority of California wheat, the yield per acre surpasses all the States of the Union, and every country in the world.

The total wheat crop of 1869 was about twenty-five million bushels, and the average annual yield amounts to twenty-one bushels to the acre. To illustrate the great productiveness of California, and to assure the reader that wheat-growing is not confined to the central valleys of the State, and that certain localities produce beyond any other portion of the world, it is only necessary to say, that throughout the northern portions of the State, and high up in the Sierras, the average of wheat and barley is greater than in the counties adjoining the Bay of San Francisco, and not so liable to rust or other blight as in these latter counties. The counties of Humboldt and Del Norte, in the rugged mountains, and at the northern line of the State, average twenty-five and twenty-seven bushels to the acre respectively; and Alpine county, perched up in the Sierras, averages twenty bushels of wheat to the acre.

Throughout all parts of the State, in the great valleys, the Sierras and the Coast Range, there are many small valleys of inexhaustible richness, producing annually from sixty to one hundred and twenty bushels of prime wheat to the acre. Like the entire grain-producing regions of the State, these valleys have been sown in wheat for from twelve to twenty years without one season's intermission, and without receiving a shovelful of manure or change of crop. Except in a few instances of gardening, there is no manure used upon the soil. Year after year, wheat, barley, beans, and potatoes are raised upon the same land, without any artificial stimulant: indeed, most of the farmers never save a particle of manure, and know but little of its use.

To illustrate the superiority of California as a wheat-growing country, let us compare the annual yield per acre with the wheat-producing regions of the Atlantic slope, as shown by the official returns for 1869. The highest yield east of the Rocky mountains is credited to Vermont—sixteen bushels to the acre; next comes Iowa—fourteen and a-half bushels; and third on the list, New York—fourteen bushels; Wisconsin, thirteen bushels; Illinois, eleven and a-half bushels; Kentucky, eight and a-half bushels; Tennessee, six bushels; Texas, six bushels; and Kansas but five bushels. It will here be seen that, in the most favored wheat-producing regions of the Atlantic States, the average yield per acre is but a little over one-half of the yield in California, while in many States it is but one-third, and in some less than one-fourth.

The California wheat is produced upon land neither requiring clearing of timber, brush, stones, or other obstructions, but where the gang-plow can run uninterrupted over *hundreds of thousands of acres*, and without the aid of manure. Then, too, there are no threatening clouds or rain-storms in the autumn sky; no binding of sheaves and stooking. The harvest is carried directly from the mower, dry as tinder, to the thresher, and from the thresher the grain is fit for the mill or shipment. The grains are not shrivelled, lean, or milky, but each grain full, plump, and hard, matured regularly and thoroughly by the uninterrupted flood of mellow sunlight falling upon it during the ripening season.

Wheat is generally put in sacks of one and two hundred pounds, and flour in sacks of from fifty to a hundred pounds, and in this manner shipped abroad or transported into the interior of the State and adjoining Territories. (See Chapter XXII.)

Wheat, flour, and grain of every description, potatoes, beets, carrots, onions, and every description of vegetables, fruit and berries, are all sold by the pound. The bushel and other such measures are unknown in California.

In the early days of California, beef was sold by the yard, and this custom still prevails in Lower California, Mexico, and South and Central America. When a beef is slaughtered, the meat is cut up into long strips, several fathoms long, and hung upon trees to dry. Neither salt nor any thing else is put on it. After it is thoroughly dried, which the pure, dry atmosphere will soon do, it is ready for the market, and, being coiled up like a rope, is carried upon the pummel of the saddle upon the long journey of the *vaquero*, or to the market.

BARLEY.—Next in importance to the wheat crop is the barley crop of California. The crop of 1869 was about nine million bushels. Barley grows in all the counties in the State, and flourishes well in the Sierra range. The grain is very large, dry, and well-filled. It is used chiefly for brewing and for feed for horses. It is used for the latter purpose almost entirely to the exclusion of corn or oats. The average yield per acre is about twenty-five bushels.

OATS.—Oats grow well in most parts of the State. Great quantities are cut green for hay, used for feed for horses, and ground into meal. The crop of 1869 was about three million bushels. The average product per acre is thirty-four bushels, and in some portions of the State one hundred and twenty-five and even one hundred and fifty bushels to the acre are produced.

WILD OATS.—Wild oats cover the whole face of the country along the Coast Range and central and southern portions of the State. They afford excellent pasturage, and are cut in great quantities for hay. The beard is long and the grain small, and much resembles the tame oats of the country, from which it is supposed to have originated from seed carried to the coast at an early day by the Spanish colonists.

Neither timothy nor clover grows in California. This is owing to the continued drought of summer, which kills the roots. Nearly all the grasses in the State grow directly from the seed deposited each year; so that no *sod* forms on the soil. Some species of bunch grass, and alfalfa, a species of clover, are the only grasses in California which continue to grow year after year from the roots.

OTHER GROWTHS.—Corn, rye, buckwheat, peas, beans, mustard, castor beans, broom corn, onions, flax, hops, tobacco, and all kinds of vegetables, grow abundantly in the State. About one million bushels of corn were grown in California in 1869, the average being thirty bushels to the acre. Peas average thirty-six bushels to the acre. Beans grow abundantly, especially along the sea-coast, where the dense fogs of summer reach them: the yield is about twenty-seven bushels to the acre.

Onions grow in great abundance, and to enormous size. About one hundred and eighty thousand bushels were produced in 1869: the average yield per acre is about sixty-eight bushels.

Flax, so far, has been grown in but two or three counties; but it will grow well in most parts of the State. There were over one hundred and twenty thousand pounds grown in 1869, chiefly in the counties of Solano, Alameda, and Santa Cruz; the former county producing more than three-fourths of the entire product of the State. Flax is a native of California, and grows wild in great abundance in many parts.

Wild mustard grows profusely through the middle, southern, and Coast Range districts of California. It is not the slender shrub of the Atlantic States, but grows in immense forests, some of the stalks growing to the size of small trees, in which the birds lodge and to which the traveller can hitch his horse in safety. The grain is very large, and of superior quality. All the mustard used in the State, together with great quantities shipped abroad, is gathered from the fields. There is enough wild mustard in California to supply the markets of the world, and many persons have, within a few years past, made many thousand dollars in a season by gathering wild mustard.

Hops, of a very superior quality, are grown in many parts of the State. The soil and climate of California are very favorable for hop-raising; the long, dry summer and autumn being very favorable for drying. About one million pounds were grown in the State in

1869, the average to the acre being about eighty-four pounds.

Neither the soil nor climate seems to be adapted to tobacco. In some localities it seems to thrive pretty well; but as a whole tobacco-growing in California has not been a success. Only about one hundred and twenty thousand pounds were raised in 1869. The average per acre is about eight hundred pounds. The quality of the California tobacco is inferior, and most of the leaf used in the manufacture of cigars is imported.

Potatoes grow everywhere in the State, and produce most abundantly. No rot, blight, or disease has ever been known to affect the potato in California, and in size and quality they are unsurpassed in the world. Single potatoes weighing from one to four pounds are common, and in some instances a single potato has weighed from six to seven pounds. The crop of 1869 amounted to about three million five hundred thousand bushels. The average yield per acre is about one hundred and twenty bushels, although in many localities it reached from three hundred and fifty to five hundred bushels to the acre. Sweet potatoes of a fine quality grow through the central and southern parts of the State.

Vegetables and fruits of every description produce most abundantly, and grow to a size unequalled in any other part of the world. The general average of fruits and vegetables in the markets of California is double the size of the best varieties in the Atlantic States, while some grow to sizes unheard of outside of California. To illustrate, a few of the large growths are here given: carrots, thirty pounds; Irish potatoes, seven pounds;

sweet potatoes, fourteen pounds; turnips, thirty pounds; watermelons, sixty-five pounds; cabbages, seventy-five pounds; beets, two hundred pounds; pumpkins, two hundred and fifty pounds, one pumpkin vine producing one hundred and thirty pumpkins of an aggregate weight of 2,604 pounds; squash, one hundred and forty pounds.

Vegetables of almost every description grow the year round, so that the markets are well supplied at every season. So soon as the vegetables are taken from the soil, the ground is tilled, fresh seed sown, the land irrigated, (if in summer,) and a new crop is started. So, too, some varieties of fruits and berries are in the market every day in the year, and generally a full supply most of the year.

The growth of fruits and berries is also remarkable. A pear, exhibited in the Washington market, San Francisco, in the fall of 1870, grown at Sutterville, Sacramento county, weighed four pounds six ounces, and measured one foot seven inches in circumference, and one foot eleven inches in girth lengthwise.

In 1870, there was raised near Sacramento a potato weighing three pounds nine ounces, and measuring fifteen and one-half inches in circumference, and twenty-three inches girth lengthwise.

A potato raised at Walnut Grove, Sacramento county, in 1869, measured fourteen inches in circumference, thirty-six inches whole length round lengthwise, and weighed four pounds. Currants grow to the size of cherries elsewhere; pears weigh four pounds; raspberries and blackberries grow most abundantly and of great size; and strawberries, which are in market from the

MOVING ON THE PLAINS.

first of March until Christmas, grow the size of plums and small potatoes. They are not taken to market in baskets and pails of a few quarts each, but by the ton: one hundred and forty tons having arrived in a single day in the San Francisco market in May, 1870. In June of this year a cherry grown in Alameda county, and exhibited in San Francisco, measured three and one-half inches in circumference.

Fruit and berries of every description are entirely free from bugs, worms, and other insects so destructive and disagreeable in most of the Atlantic States.

Apples, apricots, cherries, grapes, peaches, pears, and plums are raised in nearly every county in the State. Blackberries are chiefly grown in Alameda, Napa, Sacramento, San Joaquin, Santa Clara, Solano, and Sonoma counties. Alameda and Santa Clara counties raise nearly all our currants. The best fig counties are Sacramento, San Joaquin, Sierra, Solano, Butte, and Yuba. The same counties also furnish large quantities of nectarines. The counties producing the largest quantities of prunes are Alameda, Placer, Sacramento, Santa Clara, Sierra, and Yuba. The supply of raspberries is chiefly obtained in Alameda and Los Angeles counties. Santa Clara is the chief county for strawberries, the yield there being nearly seventy-five per cent. of the total product. Most of the quinces raised come from Los Angeles, Santa Clara, and Yuba counties. Nearly all the oranges, lemons, limes, and citron produced in the State are raised in Los Angeles county; while all the canteleups and watermelons are furnished by Sacramento county. The gooseberry crop is light, scarcely reaching one hundred tons, and Alameda probably raises more than any other county in the State. It is safe to say that nine-tenths of all the fruit raised in the State seeks San Francisco for a market; and that at least one hundred tons of the quantity sent here decays or is otherwise wasted before it passes into the hands of consumers. In the annexed table is given the aggregate pounds of the different varieties of fruit raised in California during the year 1870, together with the market value of the same, as based on the average prices in San Francisco during that season:

| | QUANTITY. | VALUE. | | QUANTITY. | VALUE. |
|---|---|---|---|---|---|
| Apples, lbs. . . | 20,755,000 | $415,100 | Raspberries, . . | 61,000 | $7,625 |
| Apricots, . . . . | 2,133,775 | 106,689 | Strawberries, . . | 1,957,000 | 166,345 |
| Blackberries, | 1,050,000 | 78,750 | Quinces, . . . . | 749,750 | 14,995 |
| Cherries, . . . . | 1,129,625 | 203,333 | Oranges, . . . | 2,466,000 | 73,980 |
| Currants, . . . . | 697,000 | 62,730 | Lemons, . . . . | 226,000 | 5,650 |
| Figs, . . . . . . | 1,066,000 | 74,620 | Limes, . . . . . | 75,000 | 1,125 |
| Grapes, . . . . . | 11,654,000 | 466,160 | Watermelons, | 50,000 | 4,000 |
| Nectarines, . . . | 720,000 | 36,000 | Canteleups, . . | 50,000 | 3,500 |
| Peaches, . . . . | 7,982,000 | 274,381 | Citron, . . . . . | 100,000 | 4,000 |
| Pears, . . . . . | 9,828,000 | 204,751 | | | |
| Plums, . . . . . | 2,952,250 | 147,613 | Total, . . . . . . . . . . . | | $2,371,612 |
| Prunes, . . . . . | 337,750 | 20,265 | | | |

The above figures show how important the fruit interest has become in California. In no State in the Union can such a variety of fruit be so successfully raised as here. The local consumption is every year increasing, while new markets are constantly being opened. The increasing demand for dried and preserved fruits gives assurance that our fruit interest may yet be more fully and profitably developed.

The following table shows the date of arrival in San Francisco of the first fruit of the season, and the prices at which such samples were sold. As the season advances and fruit becomes abundant, it also becomes cheap, grapes and other fruits retailing at from three to five cents per pound:

| FRUITS. | DATE OF ARRIVAL. | PRICE PER POUND. |
|---|---|---|
| Apples | June 15 | 25 |
| Apricots | May 28 | 75 |
| Cherries | May 2 | $1 25 |
| Currants | June 4 | 12 |
| Figs | June 28 | 40 |
| Grapes | June 27 | 50 |
| Peaches | June 15 | $1 00 |
| Pears | June 9 | 10 |
| Plums | June 10 | 60 |
| Raspberries | June 1 | 50 |
| Strawberries | March 17 | 50 |

The thrift of fruit trees in California is most remarkable. Apple, plum, peach, cherry, and pear, in the first and second year from the slip or graft, produce fruit, and trees at three and four years of age produce abundantly; and it is not uncommon to see slender slips, of one and two years old, with such a weight of fruit as breaks them to the ground. An instance came under the writer's observation, in Oregon, of an apple slip, but two years old, upon which was a solitary apple—the only one produced—measuring eight inches in circumference.

The growth of fruit trees in California is unequalled in any other part of the world. Apple, cherry, and pear trees often grow ten, twelve, and fourteen feet, from the bud, in a single year. As a rule, all fruit trees are bearing well at two and three years; and, at four years, are further advanced than their species at seven in the Atlantic States.

The climate and soil of the State are so diversified that every variety of fruit on the Atlantic shores between Maine and Florida may be found here. All the different kinds of apples, plums, cherries, currants, and gooseberries peculiar to the North are common here; so also the almost tropical oranges, olives, figs, lemons, and pomegranates.

Los Angeles and other southern counties produce most of the oranges and lemons of California, but they can be cultivated with success as far north as Sacramento and Sonoma counties; and in some instances these fruits are cultivated along the western slope of the Sierras in Amadore, Placer, Nevada, and Siskiyou counties, where the northern portion of the State joins the Sierra mountains. The number of orange trees in the State is about fifty thousand; and the yield of oranges, in 1870, is estimated at more than two and a-half million, about three times as great as the crop of any previous year. Each tree, when in full bearing, yields from twelve hundred to fifteen hundred each. The California orange has no superior anywhere: they are sweeter and finer-flavored than any of the imported, and the best qualities from the Sandwich and other Pacific islands are little sought after when California oranges are in supply.

Lemons are grown chiefly in the southern part of the State; but, like the orange, the cultivation is fast creeping toward the Sierras, and, of late years, farmers are planting lemon trees as high up as Amadore, Calaveras, and Humboldt counties. They can be grown in every county in the State.

Limes are cultivated to a limited extent; and, with proper attention, could be made a profitable branch of industry. Mexico and Central America, both of which produce great quantities of limes, offer a strong competition in the lime trade.

Figs grow all over the State: the southern and central portions produce most abundantly, but they are grown in almost every county. Sacramento and Santa Barbara are the chief producing counties. The fig grows throughout the foot-hills and up in the Sierras—as high up as Humboldt and Siskiyou counties. The trees produce most abundantly, grow very large, and bear two crops per year. Large quantities of figs are dried and sold throughout the coast.

Olives are grown in thirty counties in the State. There are about thirty thousand olive trees in California, more than half of which are in Santa Barbara county. The olive is cultivated along the western slope of the Sierras, but flourishes best in the central and southern sections of the State.

Walnuts grow in every county in the State, and are fast attracting the attention of farmers, both on account of their value for shade and timber as well as for the nuts. There are about forty thousand walnut trees in California. Santa Barbara, Sonoma, Los Angeles, and Alameda counties are the largest walnut-producing sections.

Almonds thrive throughout the central and southern portion of the State; but, like most of the other fruits and nuts, can be profitably grown in every county in California. About one-quarter of the forty-five thousand almond trees in the State is in Santa Barbara county.

So far the cultivation of prunes has been very limited. There are only about twelve thousand prune trees in the State. They can be grown up to the Sierras, but grow best in the central and southern sections.

Pomegranates have been almost entirely neglected, and the few grown in the State have been as much for ornament as for profit.

Plums, cherries, quinces, nectarines, apricots, pears, peaches, and apples grow equally well in every section of California. Apples, peaches, and pears are produced in immense quantities, and of superior quality. There are about two and a-half million apple trees in the State. Santa Clara and Sonoma counties take the lead in producing apples. The northern portion of the country produces the finest quality, but the apples of Oregon are superior to any raised in California, and the chief winter supply of California is obtained from Oregon.

Peaches grow most abundantly, and are of superior quality. During the summer months the whole country seems to be flooded with peaches. There are about one million producing trees in the State. Santa Clara, Sonoma, Sacramento, Yolo, and San Joaquin are the chief producing counties.

With strawberries ripe in February, (they are in the market eleven months in the year,) cherries in May, peaches in June, and all the varieties of fruits, nuts, and berries through the spring, summer, and fall months—with vegetables fresh from the field every day in the year—it may be said that the markets of California are constantly supplied with a greater variety and better quality of fresh vegetables, fruits, and berries than any other portion of the world. It, however, requires that skilled labor and condensed population which induces competition and economy to develop the great hidden resources of the rich soil and semi-tropical climate of California.

THE GRAPE.—California beyond all doubt is the greatest grape-producing country in the world. Grapes grow in every county in the State, from the aerial heights of Alpine and Siskiyou counties to the waters of the Colorado, and produced in an abundance unknown elsewhere. It is estimated that there are thirty-five million grape-vines in the State, and that when these are in full bearing they will produce thirty-five million gallons of wine annually. The long, dry summers of California, with the air so pure, is peculiarly adapted to the ripening and drying of the grape. Throughout the long, dry summer the leaves and branches of the grape are green; and from September until Christmas the markets are flooded with grapes of great size, variety, and richness, and at very low prices. The yield of wine to the acre, in California, is more than double the average of the best wine countries of Europe. California produces a thousand gallons to the acre; while the product of European wine-growing countries is only about four hundred gallons.

Large quantities of grapes are converted into wine and brandy and consumed for table use. In some counties species suited to making raisins are grown; but the greater part of the grapes raised are the Mission or California. They are smaller and sweeter than most other varieties; but the wine produced is inferior and is much cheaper than from the European species grown in the State. California produces from eight thousand to ten thousand pounds of grapes to the acre; while Ohio produces but five thousand pounds, and France but three thousand pounds.

Wine in quantity can be bought at the cellars in California at from twenty-five cents to seventy-five cents per gallon, according to the quality and variety of grapes used. Grapes bought by the whole crop in the vineyard bring only from one to one and a-half cents per pound; but in locations where grapes are sold for table use, and even in some instances when made into wine, a gross income of from five hundred dollars to two thousand dollars per acre is realized; but generally on cheap varieties from fifty dollars to two hundred dollars per acre is an average net profit. Almost the entire labor connected with grape culture is performed by Chinese.

The cultivation of foreign species of grapes is of late years attracting attention, and many of these varieties grow most luxuriantly, and sell at most remunerative prices. The Flaming Tokay, White Tokay, Black Malvoisie, Muscat of Alexandria, Golden Chasselas, Rose of Peru, Black and White Hamburg, all grow well.

In early days the mission fathers thought the deep, rich bottom lands the best suited to the grape: in their notions, however, they were mistaken. The grapes grown upon the highlands, and even up through the foot-hills, and grapes grown in the Sierras, are finer in flavor and make superior wine to those of the same varieties in the rich lowlands. The vines bear at two years old, and at three and four years produce abundantly. Sonoma, Los Angeles, Sacramento, Napa, and El Dorado are the chief grape-producing counties in the State. Grapes are grown in every county in California, and the foot-hills and every foot of soil along the mountain sides and the ridges of the Sierras will produce choice grapes. *There are thirty million acres of land in California upon which grapes can be grown;* and that California will eventually become the great centre of wine producing in the world seems to be but a question of time. The wine product of the State, for 1872, is estimated at ten million gallons, besides two million gallons of grape brandy.

The largest and most productive grape-vine in the world is in California, at Montecito, Santa Barbara county. In 1765, Señora Dominguez, then a little girl, was making a journey on horseback toward her home: she had in her hand for a whip a grape-vine. After riding awhile she observed that the vine was budding in her hand, and, on her arrival at home, she planted it. It grew; and to-day is fresh and vigorous, although it is entered upon its second hundredth year. From this single sprig has grown a stem eighteen inches in diameter, with innumerable branches and off-shoots covering an area one hundred and twenty feet in length and eighty feet in width, and producing between three and four tons of grapes annually. This vine and its produce had for almost a century been the chief support and shelter of its planter: for one hundred years Señora Dominguez lived beneath the hospitable shade of this vine, and on the 9th day of May, 1865, at the advanced age of one hundred and five years, and just one hundred years from the time she had planted it, surrounded by over three hundred of her offspring, in children, grandchildren, great-grandchildren, and great-great-grandchildren, Señora Dominguez died, leaving her generous vine still fresh and vigorous. The great growth and productiveness of this vine is attributed by some to the fact that its roots are watered by a mineral spring adjacent.

TEA.—China and Japan are the great supply fountains of all the tea used throughout the globe. From the palace of the Czar, the courtly halls of Westminster, and throughout every town, village, and home in America, may be found, as a staple household luxury, this

Oriental herb, so long the leading export of China, and one of the most extensive imports of America.

It has long been asserted by men of experience that the climate and soil of California were well adapted to tea-growing. But, strange to say, although Chinese have been located in every section of the State, no attempt had been made to grow tea until the summer of 1869, when Herr Schnell, an intelligent German, skilled in tea-growing in Japan, arrived with a small colony of Japanese tea-farmers and founded a colony in El Dorado county. The soil of this place is sandy, and rather dry. Tea plants, to be healthy, should not be planted in very moist soil. That upon the higher and dryer portion of this plantation is more prosperous than the other. The tea seed is about the size of an ordinary marble. They are first planted in hills, about a hundred in each hill. It takes about ten days for them to sprout; when they do, the seed is halved exactly in the centre. After the plants are about a year old, they are fit to transplant. This is done in two ways: one way, and the best, is to form a hill about eighteen inches across, the same as in raising melons; four plants describe a foot square in the circle. No irrigation is necessary after the plants get a fair start. There are over four hundred thousand in this plantation. The hills should be six feet apart one way, and eight feet the other. Another way of planting is in hedges, three rows in each hedge, with half as many in the centre as in the outside rows. Eighty-seven thousand of these are set out. There are also five million seeds planted in hills, on the place. The tea plants will attain a growth of six feet, but for use are never allowed to grow over three feet. All are growing finely upon this place, and from samples raised it is almost beyond a doubt that tea-raising in California will yet prove a success.

Owing to the fact that the land upon which Mr. Schnell's plantation was located was more valuable for gold-mining than for agriculture, and the repeated invasion of the miner, he was, in 1872, compelled to abandon it; thus ending the first practical effort in tea-growing in the State.

But one variety or kind of tea is known, and is the one designated by Dr. von Siebold as the *simensis Linn.* All of the varieties described by botanists under the names bohea, viridis, laden, stricta, &c., are only variations of the *simensis Linn.*, produced by different modes of cultivation and geographical distribution. Dr. von Siebold places the *simensis* under the *monadelphia polyandria Linn.*, and to the natural family of the *camelciarum decam.* The tea shrub in Japan is an evergreen, from four to six feet high, with a straight stem, and numerous irregular branches. Growing wild, the shrub will reach a height of fifteen or twenty feet. The stem is of a bright gray color, the branches chestnut, and the wood hard, and having a peculiar odor. On the young branches are the short, soft, green, small leaves, which are arranged in intervals, and are of an elliptical shape, with teeth on the borders, resembling closely the leaves of the wild rose. The color is a bright green, of different shades, deepening as the season advances. Between the leaves sprout the blossoms, which are at first of a rose color, but in the course of their development assume lighter shades, and finally, when full blown, are of the color of the ordinary tea-rose. They have no odor, and are very tender, but are put to no use.

The story that these flowers are preserved for mixing teas that are only drunk by the emperor and the nobility is a fabrication. When these flowers fade away, they leave a small fruit, which is divided into two or three partitions, generally three, which contain the seeds. Owing to the great quantity of oil contained in these seeds, they are difficult of preservation, and easily decay. The tea shrub is very easy of cultivation, and will grow nearly everywhere with plenty of air and sun, but cannot live in shady places. The new plants are raised from seeds, which are planted in rows in furrows from four to six inches deep, in a manner similar to that in which beans are usually planted; but, out of this number of seeds, probably but a few in each hill will sprout, owing to the decay produced by the excessive quantity of oil they contain. The proper time for tea-planting is in November or December, when it sprouts through the ground in about thirty days. By the ensuing May, the plant reaches a height of about fourteen inches, when the perfect and tender leaves are stripped off, and are placed under immediate manipulation. They are first put in a large copper pan and roasted, then put in baskets and shaken and swung in the wind until they are dried of the moisture that has been exuded by the heat, then roasted again, then rolled in the palms of the hand to separate the leaves, and prevent their crumbling into powder, then dried again in the baskets by shaking and swinging, and then put in jars, when they are ready for market. The black teas are roasted three times, the green teas but once or twice. Every year the trees or shrubs are trimmed down to a height of about three feet; after having reached that height, and when properly taken care of, they will produce good crops for upward of thirty years. It is absolutely necessary that the plants should have the morning sun, and be on the south side of a hill, or the leaves will become yellow, and the tea be of an inferior quality.

The soil and climate of California, for the growth and curing of tea, are pronounced unequalled in any part of the world. The foot-hills and western slope of the Sierras up to the deep snow line are estimated as well adapted to tea-raising. A great portion of the teas now used in the United States come direct by steamship from China and Japan to San Francisco, whence it is transported overland by rail to the Atlantic cities.

California cannot be expected to compete with China and Japan in raising tea, if it were only the difference in the cost of labor between them; but at some future period California will doubtless reckon among her varied and remunerative productions that of tea.

Beet Sugar.—California possesses many advantages over France, Germany, and other beet-growing countries. The vast alkaline regions of the State, as well as the rich bottom-lands of the valleys, produce beets of enormous size and superior quality, without artificial manure. Owing to the mild climate, beets can remain in the field until they are wanted for use, or, if pulled, can be piled in the open air or under some frail shed without danger of rot or frost. Then, too, owing to the long, dry summer, and bright sun, the California sugar-beet possesses more strength than do the beets of any other portion of the globe. About forty tons of sugar-beet can be grown upon an acre of land in California, which can be bought for one-eighth the price of land in Europe, which will not produce one-half the yield.

Europe now derives most of her sugar from the beet, which for more than forty years has kept constantly increasing as a basis of permanent supply. More than one thousand beet-sugar mills are now in operation in Europe.

Two companies have recently erected beet-sugar mills in California; and a mill in successful operation at Alvarado, Alameda county, has placed a superior article of sugar in the market. The State should not only make all the sugar used on the coast, but soon become a large exporter of that staple of commerce.

Cotton and Rice.—Some attempts at raising cotton have been made in California, with good success. In some sections of the southern portion of the State cotton will grow well, and the soil and climate seem to be well adapted to its production.

Much of the tule and other low and overflowed lands of the State are suited to rice-growing, but so far no practicable attempt has been made in this direction, except upon a very small scale upon some of the islands in the Sacramento river.

Silk.—The mulberry tree, upon the leaves of which the silk-worm feeds, grows in every county in California; there are half a million trees in the State. Sacramento, El Dorado, Yolo, Los Angeles, and Sutter are the chief silk-producing counties. The balmy, even climate of California, free from oppressive frosts, sudden changes, thunder storms, and protracted damps and colds, is peculiarly adapted to the growth of silk and the breeding of the silk-worm. The Japanese worms thrive best in California, and the staple produced is longer and finer than the best varieties of France or Italy. An excellent quality of dress silk has been manufactured in the State; but a general ignorance in reference to the raising and feeding of the worms, and also of the cultivation of the mulberry tree, has greatly retarded an important branch of industry, for which California is eminently fitted.

A small factory, for the manufacture of silk, has been recently erected at San José, and one manufacturing thread only at San Francisco. The prospects of California, at some future day, becoming an extensive silk manufacturing district are very encouraging.

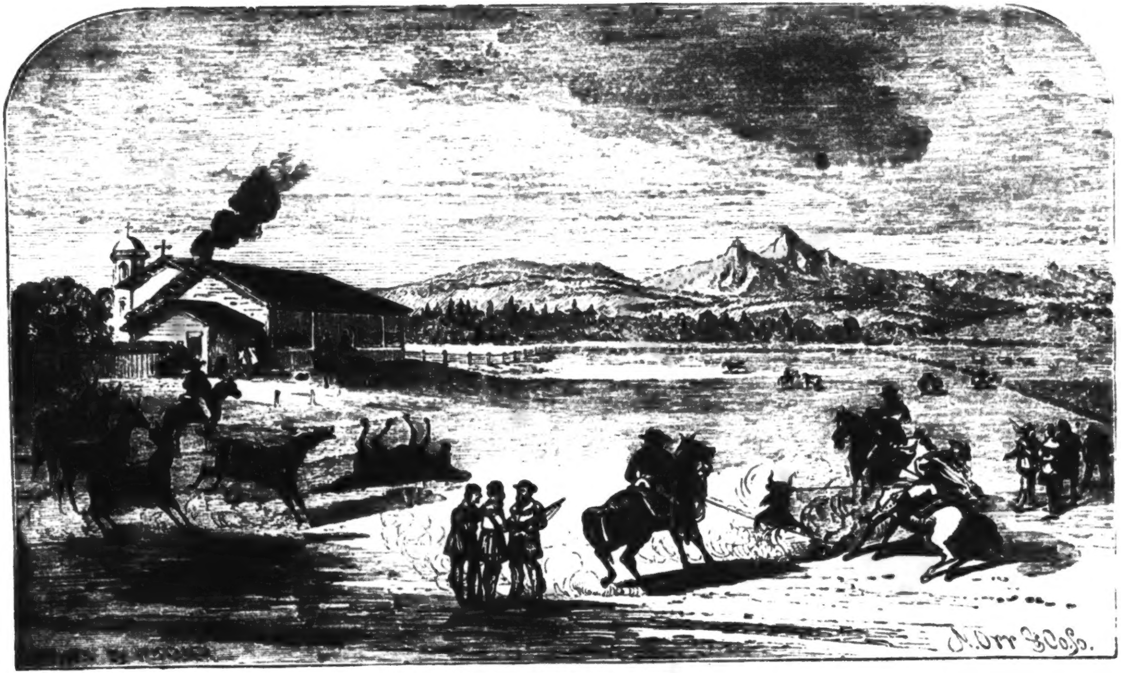
## CHAPTER XXIV.

Sheep and wool—Horses—Cattle raising and branding—Rodeos—Native horsemanship—Lassoing grizzly bears—Poultry and bees.

SHEEP AND WOOL.—Both the climate and soil of California are admirably adapted to sheep. The even temperature, generally dry weather, freeness from destructive storms, wide range of pasture, and the fact that sheep do not require shelter or food other than what nature supplies, greatly reduces the cost and labor so necessary in the Atlantic States and Europe.

Flocks in California are free from disease, and the loss by wild animals not a quarter of that throughout the Atlantic States. Sheep grow fast and mature earlier in California than in any other part of America. Ewes generally have lambs when one year old, and twins and triplets are common.

The original stock of sheep was of a very inferior quality, and consisted of the remnants of the old mission flocks and bands of very inferior stock brought into the State overland from New Mexico. But as the importance of wool-growing begins to attract attention, the stock is exhibiting signs of decided improvement by the introduction of pure-blooded sheep. Still there are flocks of the old stock (Mexican sheep) yet in the State, roaming the sandy and dusty plains of the southern section of California, as much like wolves, as regards wool, as like sheep. This class averages a fleece of wool, sand, and dirt, as it is sheared, of only two pounds. Inferior American sheep in the State average a clip of four pounds; while merino and improved breeds yield



RODEO—CATTLE-BRANDING.

from six or eight to twelve and twenty pounds. The largest fleece produced in the State was by a French merino buck in Monterey county—forty-two pounds. All these weights are given before the fleeces are washed.

The raising of sheep for their wool was first commenced in California in 1853, and since that period the increase has been steady. The first exportation of wool from the State was in 1855—three hundred and sixty thousand pounds. The wool crop of California for 1871 reached twenty-eight million pounds, worth about seven million five hundred thousand dollars. Of the entire growth, four million pounds were used in the factories in California, and twenty-two million five hundred thousand pounds sold in the Atlantic States, of which 2,223,322 pounds went by sea, and 20,100,182 pounds by rail.

The remarkable development of wool-growing in California, and the unlimited extent to which it may attain in the genial climate and on the broad ranges of the Golden State, and the importance of this product to the nation, may be ascertained in some degree by the table here giving the export of wool from San Francisco during the past fifteen years:

| YEAR. | POUNDS. | VALUE. |
|---|---|---|
| 1857, | 1,100,000, | $173,500 |
| 1858, | 1,430,000, | 200,000 |
| 1859, | 2,375,000, | 353,500 |
| 1860, | 3,170,000, | 400,000 |
| 1861, | 3,730,000, | 510,000 |
| 1862, | 5,900,000, | 1,062,000 |
| 1863, | 2,270,000, | 1,230,000 |
| 1864, | 5,930,000, | 1,252,000 |
| 1865, | 6,473,000, | 1,350,000 |
| 1866, | 4,674,000, | 950,000 |
| 1867, | 7,048,000, | 1,215,000 |
| 1868, | 13,225,000, | 2,428,000 |
| 1869, | 13,274,000, | 2,454,000 |
| 1870, | 19,010,000, | 3,506,000 |
| 1871, | 22,323,000, | 6,697,000 |

There are about two million five hundred thousand sheep and twenty-five thousand Cashmere and Angora goats in the State. Flocks of three, eight, ten, and twenty thousand are not uncommon; and one sheep-raiser in the southern section of the State, who, in 1853, commenced in poverty to raise sheep, has now about eighty thousand acres of land, and owns forty thousand sheep, chiefly of superior breeds.

There are six woollen mills in California, which use annually over four million pounds of wool. Cassimeres, tweeds, flannels, a variety of other goods, and blankets, are produced at these mills Only the finest grades of wool are used, and the California made blankets, in size, weight, and fineness, surpass those made in any other part of the world. California is now highest on the list of wool-producing States in the Union.

Cattle.—As early as the first settlement of California, cattle were introduced from Spain and Mexico. But little attention was paid to milk or butter, and cattle of every description and age ran wild together. They soon multiplied, and in great herds grazed upon the hills and roamed the valleys as wild as deer. They were used only for beef and for their hides and tallow, which, for many years previous to the American occupation of the country, formed the chief export. At this early period cows were never milked; when beef was wanted, the vaquero, *reata* in hand, mounted his fleet horse, dashed into the band, and, snaring one, led it to the slaughter; or, when hides and tallow were wanted for the trading vessels of the coast, whole herds were slaughtered upon the field, the hides and tallow carried away, and the carcass left where the animal was slain. Great numbers of Spanish cattle still roam over the southern portion of the State; these cattle resemble the wild beasts of the forest more than cows; they are generally of a yellowish-brown or drab color, with large, dark circles round the eyes and nostrils; long, slim legs, as lank as a hound and fleet as a deer; their horns grow immense, sometimes measuring eight feet from tip to tip. As all the herders and vaqueros are always mounted, these cattle, not being accustomed to see a man on foot, will, when they chance to see one, encircle him, and often with great fury attack him.

The introduction of superior stock is fast absorbing the original Spanish cattle of the State; but immense bands of Spanish and mixed cattle yet run wild.

Except in a few instances where cows are milked, or a few oxen worked, cattle are never handled: they roam, cows, calves, and all, in great herds. Once a year, at least—generally in the spring—there is a general *rodeo*, or gathering, of the cattle and horses together, that all the young ones may be branded according to law; as a statute imposes the duty upon all stock owners to brand with a hot iron all cattle and horses on the hip with some letter or sign, which shall be recorded as their mark.

The general *rodeo* is a season of great activity and excitement, from a week to ten days generally being spent in the exciting business of collecting every description of cattle within a wide district into some small valley, where a corral or pen is erected, the object being to secure every unmarked animal so that the owner may imprint his brand upon it. To accomplish this the vaquero, mounted upon his fleet steed, or a dozen of them thus mounted, gallop in among the cattle, others circling the bands to keep them together; pursuit is given to an unbranded animal, the race continuing amidst the swaying, tossing, thousands of cattle bellowing, running, pawing, and raising clouds of dust, through which the active riders whirl, gallop, and plunge as they swing their reatas. When an animal is looped by the neck, horns, or foot, it is led to the branding place, secured, and the hot iron pressed deep upon the hip.

At these seasons each band is separated, and the vaqueros keep a kind of guardianship over the herds. During these gatherings the cattle-owners and vaqueros camp out, or at some neighbor's house hold fandangos, and, amidst a copious supply of wine and eatables, conclude their great annual rodeo.

The horsemanship of the vaquero during these exciting scenes is a most interesting feature of the performance. The fleetness of horses and the dexterity with which the lasso is thrown are often made tests of efficiency between contestants for superior horsemanship.

The horse is so trained that, without the use of bridle or rein, he will follow, however long or devious the course, the animal selected for capture; and, anticipating every move of his rider, will watch the throwing of the lariat, brace himself, or fall upon his haunches; and, with the raw-hide reata stretched from the captured animal to the pummel of the saddle, lead the most refractory animal at will.

So expert, too, is the vaquero in the use of the lariat that, coiling it in a loose bunch in his hand, swinging it about his head he will throw the bunch, one end being still fast to the saddle, and snare by the foot, horn, or neck an animal whilst his horse is under full gallop. Should his hat, his knife, or rope fall, he never dismounts, and seldom slackens his speed, but, whilst his horse is on the full run, swoops down upon the ground with one hand, while his heel or spur pressed under the saddle-girth holds him to his position on his horse. The greatest skill and dexterity of the vaquero is exhibited in catching wild animals. At an early day, and before fire-arms were much in use, wild cattle, horses, elk, deer, and all other animals, whether for domestic uses or for the sake of their flesh, were caught with the lasso; and the Mexican hunter started in pursuit of the grizzly bear mounted upon his fleet pony, and armed only with a raw-hide rope. Generally three, four, or more of these mounted hunters thus armed would scour the gulches and mountains until they found their game. The formidable grizzly, surrounded by the expert vaqueros, would soon find himself snared by the neck by two or three sharp hide ropes, with one end of each fast to the saddle-pummel, and horses drawing in opposite directions; thus, half strangled, leaping, and gnawing at the lariat, the unlucky animal is caught by the legs by the reatas of other riders and either despatched by the hunter's knife, strangled to death, or, surrounded by horses and lines, led an unwilling captive to the rancho of the hunter. Some of these encounters have been most desperate and hard fought. Lassoing grizzly bears is attended with great danger, and few persons knowing the immense strength of these animals desire to experiment upon such game. But the Mexican fears nothing when armed with the reata and mounted upon his horse.

Cattle, as well as all other live stock in California, run at large, are never housed, nor receive food, except what nature provides for them.

During extremely dry seasons, when the pasturage becomes scarce, and the soil almost parched, cattle suffer for want of food: at such periods, large numbers are driven to the mountains, generally to the Sierras, where the natural meadows and wild grasses keep green during the greater part of summer.

Farmers have been in the habit of burning their straw upon the field in the fall: of late years, straw has been more generally heaped up in the fields, sometimes under large sheds. During the drought of summer and the cold rains of winter, cattle gather round these stacks and keep in good condition, while those having to depend upon what they can gather from the parched soil often suffer.

The number of neat cattle in the State is about one million; the largest number in any one county is in Merced—sixty thousand; the next largest numbers are in Kern, Tulare, Colusa, and San Diego. Marin county contains about twenty-four thousand head of cattle, and is the greatest dairy county in the State. The celebrated ranche (farm) of the Shafter Brothers, containing seventy-five thousand acres, is in this county: this is supposed to be the largest dairy farm in the world. There are no "dairy-maids" in California, milking and butter and cheese making being done by men.

The whole State produces about six million pounds of butter annually, and one-third of this whole amount is produced in Marin county, which has but about twenty-four thousand neat cattle, all told, out of one million, in the State. Merced county, with sixty thou-

LASSOING HORSES IN CALIFORNIA.

sand head of cattle, produces but about nine thousand pounds of butter annually. California produces about five million pounds of cheese annually. Santa Clara and Monterey counties produce jointly three million pounds, leaving but two million pounds to the entire remainder of the State. Santa Clara county makes as much cheese as all the State, outside of Santa Clara and Monterey counties; Santa Clara county has but twenty-two thousand cattle, seven thousand of which are cows.

Spanish cows give but little milk, and in many of the southern counties, where immense herds of cattle roam, milk, butter, and cheese are unknown. The squatter and ranchero have their frail abodes solitary and alone on the vast plain, or by the side of some sluggish stream or tule bottom; and here they raise their children, without ever tasting milk, butter, or cheese. It is a strange commentary upon domestic economy to see vast droves of cows, calves and all, running wild, fairly swarming the country, and surrounding the houses in which dwell sickly and green-looking women, who live upon hot biscuits rank with saleratus, squash and salt bacon—they and their children—without knowing the use or benefits of the dairy. In one portion, at least, of the southern counties, where cattle are so numerous that they swarm around the telegraph poles to scratch themselves in such numbers that they cut down the poles for miles, although they are made of eight-inch-square sawed lumber, and in some instances driven thick with spikes, the cattle swarming round them in a circle, and each one giving a rub in its hurried march; yet in this section the traveller, for a journey of two hundred miles, cannot get a taste of butter or cheese, nor milk to color his black and bitter coffee.

Notwithstanding the genial climate, wide range, and splendid pasturage of California, fully one-third of all the butter used in the State is imported from the Atlantic States; this, too, is the case with Oregon, Washington Territory, and British Columbia. The people of these regions send their orders from their perpetual green fields and rich pasturage to New York and even to the icy land of Canada for their butter. This, perhaps, is not worse than sending to Boston, New York, and Philadelphia for dried fruits, from California and Oregon, when thousands of tons of green fruit can be gathered in the orchards of these States, and bought for less than the freight from the east. Through most parts of the Pacific coast dried fruits are imported thousands of miles at great cost, while the ground in many orchards is covered with superior fruit, which rots in tons every year.

THE HORSE.—Of all parts of the world California is the favorite land for the horse: here he has for centuries roamed at will over the vast rich valleys, where the native grass, flowers, and wild oats grow luxuriantly.

Previous to the American occupation of the country, the horse was not doomed to the servile labor of drawing the plow or wheeled carriage, as no such articles were known to the population: his only occupation was to carry his master upon his back; stables and harness were equally unknown.

The original stock introduced into the country from Spain and Mexico possessed excellent qualities for the saddle, being light bodied, high spirited, and fleet.

After roaming wild in great bands, without any care, the stock soon degenerated to all sorts of base colors—claybank, drab, and spotted; leaving few of the deep bay, iron-gray, pure white, or jet black: still the spirit, endurance, and speed of the original Spanish stock remained, and, while the California horse became unfitted for heavy draught, he became the finest saddle-horse in the world, able to carry his rider sixty and one hundred miles in a day over a rough road, and perform these journeys several days in succession, without other food than could be gathered from the soil on his journey.

The California horse rarely trots or walks: his gait, under the saddle, is a fast gallop, which he will keep up, over hill and down mountain sides alike, through a whole day's journey, and generally pressing hard on the rein, the whip or spur being rarely necessary.

Breaking these horses to the saddle is attended with much difficulty. Many of them at four, five, and even ten years of age have never been within an enclosure, nor had the hand of man upon them. They are lassoed, like other wild beasts, blindfolded, a saddle and bridle put upon them, and then mounted by the vaquero, (rider.) Rearing, pitching, rolling, and jumping stiff-legged, until they are completely exhausted, is a part of their first exercise. They are, however, soon broken to the saddle, and from the commencement of their training rarely exhibit a vicious disposition, and, when once fairly broken, are kind, gentle, and fond of their master.

Horses in California increase fast, and are entirely free from disease: bots, worms, spavin, ringbone, and kindred diseases, are almost unknown. The evenness of the climate, with an abundance of good, wholesome food, and freedom from unwholesome and close stables and attacks of colds, renders the horse healthy, muscular, sound, and hardy beyond the horses of any other part of the United States, if not of any other part of the world.

Of the three hundred thousand horses in California, fully one-half are wild Mexican stock, running in large bands throughout the southern part of the State. Many thousand are owned by persons who know them only by the brand.

Throughout the State generally the horse is an indispensable domestic servant. Everybody rides: men going to their employment in the fields mount their horses; neighbors visiting, and children going to school in the country, all ride. It is rare to see a person making a journey on foot, except in the mining regions.

California has many fine roads, and to all parts of the interior the chief travel is done by stages—large, comfortable Concord coaches—carrying from twelve to twenty persons, and drawn by four or six horses. Relays of fresh horses are kept at each ten or twelve miles on the road, and while in the coach are generally at a gallop, and the speed with which these horses dash down the mountain sides, and over and along the deep gulches and beside the frowning precipices, is fearful.

In the cities and towns, horses are very numerous, and in San Francisco county (which is but the size of the city) there are over ten thousand horses. Los Angeles county has the largest number of horses of any county in the State—fifteen thousand.

There being neither timothy nor clover in California, the native grasses, wild oats, oats, and barley, cut green, form the hay-feed of horses. Barley, which grows very abundantly, and has a very large, dry, and plump grain, is supplied to horses generally, and is supposed to be superior to oats for this purpose.

The introduction of superior horses into the State is fast improving the native stock, and the cross between the imported and native horse has many points of superiority not to be found in either in their original purity.

Mules are not generally used in the State. At an early day the carrying of freight into the mines and over the mountains was done chiefly by pack-trains of mules; but of late years rail and wagon roads have supplanted them. There are but about twenty-eight thousand mules in the State, scattered through each county; Mendocino county having about three thousand—more than double that of any other county in the State. Mules are no more serviceable than horses, and cost generally more than double as much as the ordinary farm-horse. Much of the heavy hauling and of the labor connected with the government service is still done by mules.

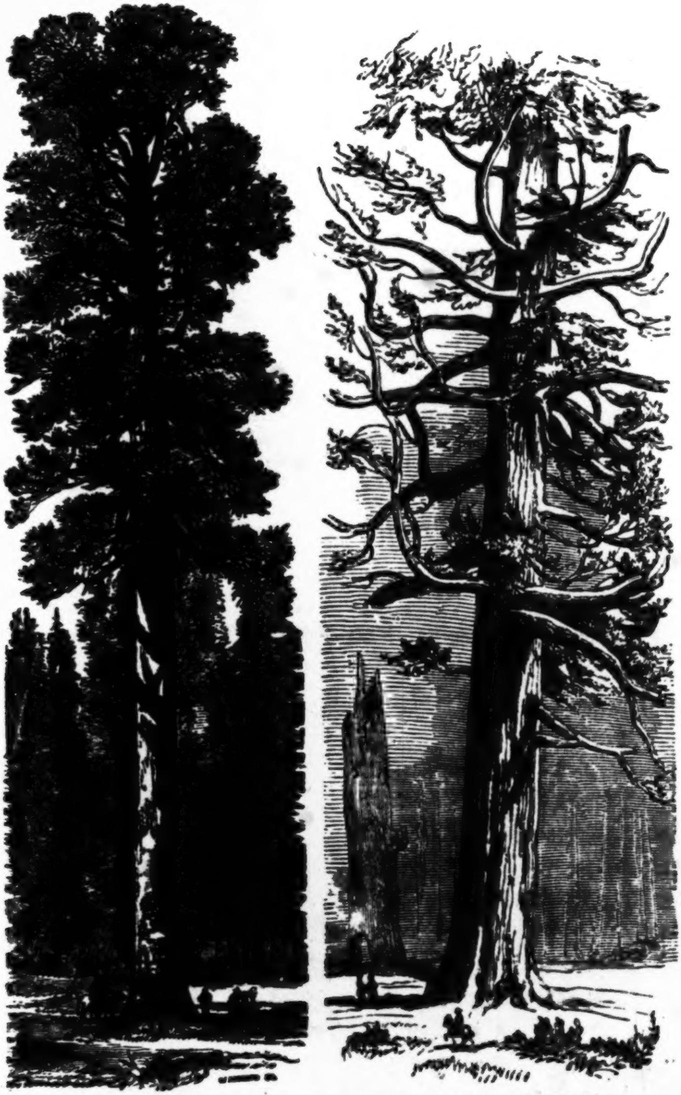
Oxen are rarely used, either upon the farm or for general labor, in California; they are considered too slow, and except in the lumber districts are scarcely to be seen. All the ploughing and farm work is done by horses and mules.

HOGS.—The greater part of the State of California is not well adapted for hogs: it is too dry; but in the tule and low lands they thrive well. Labor and food for hogs are too expensive to make the raising of hogs profitable where they have to be fed by hand. There are six hundred thousand hogs in the State; still the increase has been but little for many years. Considerable quantities of bacon and ham are cured in the State; and as the Chinese in the country use no other meat but fresh pork, much of the pork of the State is consumed by these people.

POULTRY.—Turkeys, geese, ducks, and hens all thrive well in California, and many a fortune has had its foundation *laid* in the hen's nest, in the State, in the early days when eggs were from three to ten dollars per dozen, and chickens from two to ten dollars per pair. The aggregate number of turkeys, geese, ducks, and fowls in the State is one million five hundred thousand.

BEES.—Bees do well all over the Pacific coast. In Oregon they make honey from the branches of the fir trees; and in California the mild climate and the abundance of wild flowers enable bees to make honey eight to ten months in the year, and to propagate their species with great rapidity, one hive often producing twenty swarms in a year. The production of honey in California is much greater than in any other part of the United States, and is about five times as much as is produced in the Atlantic States. There are about sixty thousand hives in California, Colusa county having sixteen thousand—more than one-fourth of all the hives in the State: then comes Butte county, with twenty-five hundred hives; next comes Stanislaus county, with about two thousand hives; and Monterey and Los Angeles counties, with about eighteen hundred each. Bees will thrive well in every county in the State.

In the southern section of California great quantities of bees have swarmed in the trunks of hollow trees and become wild. There are great quantities of honey obtained annually from these deserters.



"BIG TREES," MARIPOSA AND CALVERAS GROVES, CALIFORNIA.

(First tree, 350 feet high and 28 feet in diameter; Second tree 386 feet high and 31 feet in diameter.)

NEVADA FALLS, YOSEMITE VALLEY.
(700 feet high)

THE PIONEER'S CABIN: "ROOM FOR THIRTY INSIDE."

## CHAPTER XXV.

Natural advantages—Regularity of climate—Perpetual summer—Advantages for manufacturing—Interest on money—Manufactories—Railroads first in California—Great overland railroad: building and completion of—Government aid in bonds and lands to railroads—"The last tie"—Rejoicings at the completion of the great national highway—Ocean, bay, and river navigation—Shipbuilding—Telegraphs, postage, and post-offices—United States branch mint—Circulating medium—Mints on the Pacific coast—Navy-yard—Commerce—Exports of gold and merchandise—Agricultural and mechanical products—Decline in gold-mining—Shipping of San Francisco—Imports and exports—Effects of the overland railroad.

California possesses many natural advantages beyond most other States in the Union, which must ultimately be productive of great benefits. The water-power of the dashing streams of the Sierras alone is greater than the whole water-power of New England; the Coast Range, too, particularly north of San Francisco, as well as many other parts of the State, has vast water-power, only waiting the hand of skilled labor to call it into turning the wheels of an active manufacture which must at some day not far distant form an important branch of the industry of the State; nor are these magnificent water-powers subjected to the pinching frosts of winter, which for so many months in the year bind up the forces of the streams, clog the wheels, and hold in icy embrace the industry of large sections of the Atlantic coast.

The room of the operative need not be heated with air-consuming stoves and ranges, nor the apartments filled with foul air, caused by closed doors and windows; nor the operative himself imprisoned in dark cells or steam closets to keep the animal forces active. The climate of the entire State is so mild and the temperature so even that the severe colds and diseases engendered by the sudden changes of the weather in the Atlantic States are entirely unknown in California.

Neither chilling northern blasts nor drifting snows drive over bleak and barren fields, pinching animal life into trembling and contracted contortions, nor frosting the windows and whitening the forests. Winter's gray locks are not shaken with terrible menace in the face of the poor, nor is the approach of the new year looked forward to with contemplations of dreaded cold. California at this season asserts her eternal summer by new robes of green, and the window of the cotter, instead of the ice-crystallizations and snow-bank adornments of the Atlantic slope, are festooned and adorned with running vines, ivy, and delicate flowers.

Throughout the State, wherever mechanical skill is exercised and manufactures are carried on, the beneficial effects of a genial climate and rich soil are manifest by the ease, comfort, and increasing prosperity of the mechanic. With all the natural advantages of California for manufacturing, but little advance has been made, except in the actual necessities for every-day consumption and of the commonest articles of domestic use. The cause of this has been the high rates of wages, the sparse population, and the high rates of interest, want of cheap transportation, and many other causes incident to a new country.

The crushing of quartz, cabinet work, sawing of lumber, casting of iron, and making of flour form the chief mechanical industry of the State; and, although most of the raw material necessary in a varied manufacturing industry is produced in great abundance in California—metals, wood, leather, wool, and other articles—yet the State cannot compete in manufactures with the old, settled portions of America, Europe, and Asia; where cheap labor, low interest, and systematized skill offset the natural advantages of the Golden State. In many parts of Europe and Asia, capital for mechanical industry can be obtained at from three to seven per cent. per annum; while in California, short loans, secured by good collateral, payable in sixty and ninety days, bear interest at from one to three per cent. per month. Still, notwithstanding all these drawbacks, California is battling bravely in the field of mechanical industry; and, although her manufactures are confined to a few articles, and within small limits, the efforts in producing woollen goods, cordage, powder, glass, paper, machinery, pottery, castings, shot, lead pipe, refined sugar, furniture, wood-ware, rolling stock, files, salt, fuse, soap, candles, glue, oil, matches, lime, cement, chemicals, boots and shoes, carriages, agricultural implements, saddlery, matting, billiard tables, pianos, brooms, pails, books, clothing, cigars, spirits, ale, and wine form no inconsiderable feature of the prosperity of the State. San Francisco is daily growing into importance in manufacture, and, by degrees, as the price of labor becomes lower, and the *one and a-half and two per cent. per month* bankers relax their grip, and money can be obtained at reduced rates of interest, many branches of mechanical industry now struggling for recognition will become extensive and profitable.

## RAILROADS.

In 1841, there were in the whole United States but 3.535 miles of railroad in operation; in 1850, but 8,876. In 1870, there were fifty thousand miles, of which the six New England States had 4,494, against 589 in 1841; the six Middle States, 10,991, against 1,837 in 1841; the ten Western States, 23,769, against 196 in 1841; and the twelve Southern States, 12,468, against 913 in 1841; and the Pacific coast, which as late as 1854 had not a foot and in 1855 but *eight* miles of railroad, had, in 1870, 1,677, as follows: California, 925; Oregon, 159; and Nevada, 593; all of which have since largely increased, there now being thousands of miles of railroad projected through California, Oregon, Nevada, Washington Territory, Idaho, Arizona, and the entire coast, connecting all the principal towns, valleys, and harbors in the country.

The first railroad built in California was the line of twenty-two miles from Sacramento City to Folsom, completed on the 1st of January, 1856. The building of other roads soon followed, until the present, when a lively competition has projected and has in active course of construction lines of road running in all directions from the great commercial centres of the State, until the rich agricultural valleys lying between the Coast Range and the Sierras, parallel with the ocean and these chains, are completely dotted with projected lines of rail running in all directions, all having connection by land or water with San Francisco.

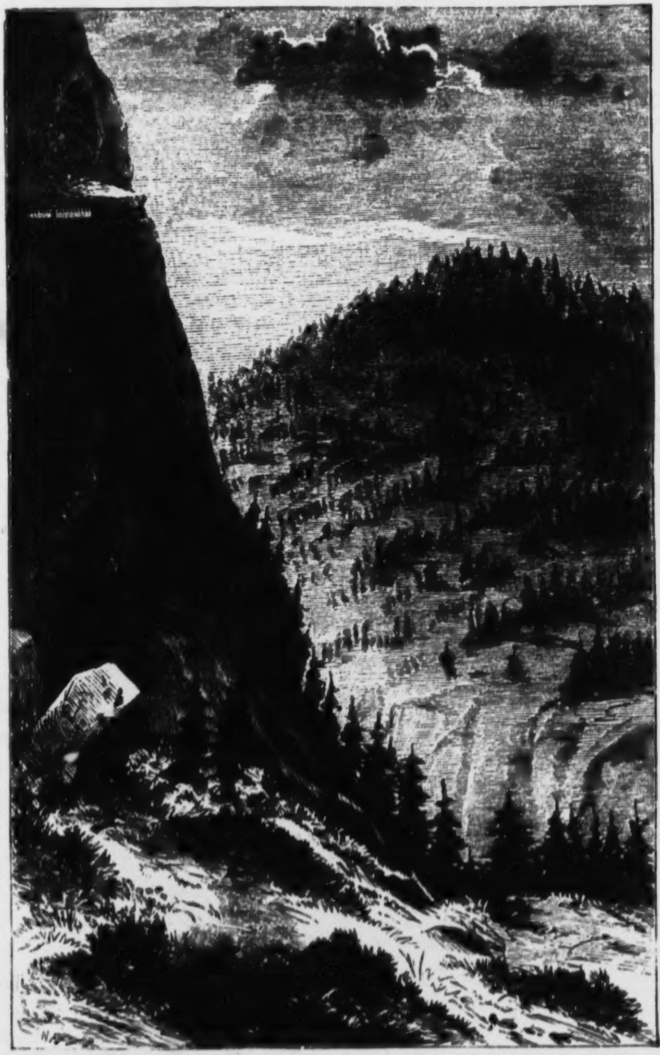
South of the Golden Gate are lines running to San José and all sections along the southern coast of the State, eventually to reach San Diego, while lines traverse the rich agricultural valleys of the San Joaquin and Tulare, destined to reach the Colorado and the Southern Pacific roads, sending their laterals in all directions to the towns, valleys, and mines on either side; while the *Atlantic and Pacific railroad*, having its starting point on the west side of the Mississippi at St. Louis, Missouri, follows the thirty-fifth parallel of north latitude, passing through Missouri, Indian Territory, New Mexico, and Arizona, crossing the Colorado, enters California, and, passing northwestward through the southern half of the State, reaches San Francisco. Farther south is the *Southern Pacific railroad*, following from Memphis on the Mississippi a little west of the thirty-second parallel of north latitude westward through Arkansas, Texas, and the southern section of New Mexico and Arizona, crossing the Colorado river close to the Mexican line; thence west to the city of San Diego near the southern line of the State of California, where it proceeds northwestward until, like all the others, it finally reaches San Francisco.

These two international roads, connecting the Pacific and the Atlantic, are being vigorously pushed to completion; and will, in their course, develop and settle the vast semi-tropical regions of Southern California and the rich mineral, agricultural, and grazing region between the Colorado and the Mississippi through Arizona, New Mexico, Texas, and the Indian Territory, affording direct and certain communication, at all seasons of the year, between the Pacific and Atlantic; and, finally sending their branches into tropical Mexico, will open up new and rich avenues of exploration, commerce, and settlement, and eventually plant the flag of republican America over the area of the semi-republic of Mexico.

North and east of San Francisco are lines built and projected in all directions, leading through the valleys of the Coast Range to Humboldt and other points in the northern extreme of the State; while lines, connecting by boat at San Francisco with Oakland, Vallejo, and San Rafael, lead east and north to all the principal interior towns and valleys, and extend finally to the Oregon State line, where they join lines of railroads through the rich valley of the Wallamet and other sections of Oregon, and finally northward, crossing the Columbia river, and still on, across Washington Territory, until they reach, by direct and continuous rail, every portion of the continent from Pictou and Halifax, Nova Scotia, Boston, St. Louis, Mexico, California, Oregon, and Washington Territory, right up to the British line on the Pacific ocean, at the forty-ninth degree of north latitude.

## CENTRAL PACIFIC RAILROAD.

On the 8th day of January, 1863, ground was first broken at the city of Sacramento, California, and labor begun upon this national highway, which cuts the Sierras and Rocky mountains, spans vast plains, deserts, and prairies, and unites the Atlantic and Pacific by continuous iron rail. In its connections it forms a chain of road across the entire continent, a distance of three thousand three hundred and twenty-three miles, from San Francisco to New York city. It is eight hundred and eighty miles from San Francisco to Ogden, at the northern end of Great Salt lake, Utah Territory, which is the eastern end of this road; from this point eastward to Omaha, Nebraska, on the western bank of the Missouri river, a distance of one thousand and thirty-three



CAPE HORN—CENTRAL PACIFIC RAILROAD, SIERRA NEVADA MOUNTAINS.
(Cars 2,500 feet above the American river, in the chasm below.)

miles, was built by the Union Pacific Railroad Company. At Omaha and Chicago connections are made with this road by various lines connecting with all parts of the West, east of Omaha, and all parts of the Atlantic seaboard, Canada, and the lower British provinces.

The cars of this line do not run into the city of San Francisco, but have their terminus on a long wharf projecting three miles into the waters of the Bay of San Francisco at Oakland, in Alameda county, three miles distant, directly east from San Francisco. Large and elegant steam ferry-boats ply between these points every few minutes. At the town of Vallejo, twenty-eight miles northeast from San Francisco, in Solano county, on the shore of the distant waters of the bay, is also another terminus. Large and elegant steamers run between San Francisco and this point several times each day, carrying overland and way passengers and mail to the trains which run to Sacramento and on to the Atlantic States.

The running time on these roads, forming the great overland line, is seven days from San Francisco to New York and Boston.

In the construction of this road most formidable obstacles have been overcome: the Sierra Nevada mountains, long considered a barrier over and beyond which no road could pass, have been pierced by immense tunnels, their deep gulches spanned by bridges, and their frowning brows grooved for the foot of the iron horse. The dreaded Rocky mountains yielded to science and labor, and their precipitous and stern elevations were climbed, and their rugged peaks flung into the torrents and gulches below. The greatest altitude on this line from San Francisco to New York is on the summit of the Rocky mountains, at Sherman, in Wyoming Territory, on the Union Pacific road, 1,365 miles east of San Francisco. This point has an altitude of 8,242 feet above the level of the sea. The highest point on the Central Pacific road, from San Francisco to Ogden, is in the Sierras, two hundred and forty-three miles from San Francisco, at Summit, and a few miles west of the eastern State line of California. At this point the altitude reaches a height of 7,017 feet above the level of the sea.

This great national highway in its course passes in a northeasterly direction from San Francisco, through the States of California and Nevada and a portion of Utah Territory, until it reaches Ogden, in Utah Territory, a little north of Great Salt lake. At this point the road runs almost due east, passing through the southern side of Wyoming Territory for its entire length, and through the entire length of Nebraska, following the course of the Platte river, to Omaha; thence along the southern side of the State of Iowa, and through Illinois, to the city of Chicago, on the southwestern shore of Lake Michigan, where it joins the great network of railroads spreading over the entire country south, east, and north of this point.

This great continental highway was begun and its construction vigorously prosecuted during the internal war in America, from 1861 to 1865; and throughout all that critical and eventful period received the fostering care and stimulus of the national government, and the people on both sides of the continent took the deepest interest in its success, and the States and Territories through which it passes aided it financially in a most liberal manner. To the two companies building the road—the Central Pacific on the California side, and the Union Pacific on the eastern side—the National Congress donated by grant, in *fee simple*, alternate sections of land along the line of the roads of these two companies amounting to 12,800 acres per mile, for each mile built, from Sacramento to Omaha, or an aggregate of 22,707,200 acres. Of this grant the Central Pacific received 8,832,000 acres, and the Union Pacific 13,875,200 acres.

The federal government also loaned to these two companies $52,840,000 of six per cent. thirty years bonds, and guaranteed the interest on the companies' first mortgage bonds to an equal amount—the interest paid by government on these bonds to be paid back by the companies. These are the most munificent donations ever made by any nation to any project or for any purpose in any age. The two companies building this road built the number of miles, and received the amounts of the national donation, as follows: Central Pacific built six hundred and ninety miles and received $24,386,000; the Union Pacific (from Ogden to Omaha) built 1,084 miles and received $28,456,000. The grant was distributed per mile, according to the difficulty in constructing: over the plains, sixteen thousand dollars per mile; second class, thirty-two thousand dollars per mile; and for the mountains, forty-eight thousand dollars per mile. Of these classes of road the companies built as follows, (which will account for the seeming small proportion received by the Union Pacific Company:) the Central Pacific (California) built twelve miles at sixteen thousand dollars per mile, five hundred and twenty-two miles at thirty-two thousand dollars per mile, and one hundred and fifty-six miles at forty-eight thousand dollars per mile; the Union Pacific Company built five hundred and twenty-six miles at sixteen thousand dollars per mile, four hundred and eight miles at thirty-two thousand dollars per mile, and one hundred and fifty miles at forty-eight thousand dollars per mile.

For more than half a century the subject of connecting the Pacific and Atlantic sides of the continent by rail had been agitated; but the friends of such a scheme were ridiculed by those who contemplated the vast arid plains and the stern Rocky mountains and Sierras, considered insurmountable barriers. Indeed, many of those who most zealously advocated the practicability of a railroad crossing these formidable mountain chains were regarded as insane, and not until the indomitable Californian had scaled the Sierras, and pierced their mighty granite ribs, did the people of the country become inspired with the possibility of uniting the East and the Pacific slope by rail; but the patient sons of the Orient, under the lead of American skill, toiling through and over the Sierras, gave confidence to the people of the Atlantic side, who set their faces toward the setting sun, and advanced to meet the laborers marching east.

The Central Pacific Company having completed the road from the waters of the Pacific to Promontory, in Utah Territory, and the Union Pacific Company having finished that from Omaha westward to Promontory, great preparations were made for celebrating the joining of the iron band connecting the East and the West. After six long years of unremitting toil, the task was ended: the army of eight thousand of the meek disciples of Confucius, headed by skilled engineers, had subdued nature in the formidable Sierras; bridges spanned deep and awful gorges, and angry, foaming streams; long tunnels pierced solid granite domes, and deep scars found safe footing for the iron horse round the sharp curves of frowning granite battlements and bold, projecting bluffs. The division from the East had passed the vast deserts dotted with neglected graves and the bleaching bones of the overburdened beast which fell by the wayside, and climbed the stern sides of the Rocky mountains. It was a meeting of the extremes of the nation—the joining of the East and the West. The day came upon which the last tie and the last rail were to be put in place: trains from the East arrived from the shores of the Atlantic gayly bedecked with flags, mottoes, and devices of victory; and up from the Golden Gate, in the Far West, where the setting sun bathes in the calm waters of the Pacific, came the hardy sons of California, with their callous hands and open hearts, to join their brothers of the East; from the East, dashing over vast plains, and bounding over the Rocky mountains, and from the West, over the eternal snows and through the storm-clouds of the Sierras, came the impatient steed, whose fiery breath and hoarse shriek put to flight the children of the forest. In this triumphal train from the West came the "last tie"—a polished laurel from the golden shore of California—and the "last spike," of pure gold from the rocks of the Sierras. In the midst of the vast concourse from the East and West, the almond-eyed son of Asia, facing East, and the sturdy Celt and Saxon, facing West, join hands, as with uncovered heads, beneath the ensign of the republic, and amidst the firing of cannon, ringing of bells, and screaming of whistles, the last tie was laid and the last spike driven in the national highway joining the two great oceans.

Extensive preparations had been made to celebrate the completion of this great work throughout the whole country. A telegraph station at the junction was so arranged that instant communication could be sent to all parts of the republic of the final joining of the rails, and the firing of guns by electricity at remote points.

At twelve o'clock M., on the 10th of May, 1869, the President of the Central Pacific road, with gold hammer in hand, stepped forward; a blessing was invoked by a clergyman present, all heads uncovered; a gentle blow of the hammer fell upon the last spike: the friction of the blow fired a fifteen-inch Parrott gun at the Golden Gate, *eight hundred and eighty miles distant*, rang the bells in the cities of San Francisco, Chicago, New York, Boston, Halifax, Nova Scotia, and other places; and the people throughout the land spent the day in rejoicing at the completion of the grandest work of man ever undertaken, and the greatest triumph of art over nature.

The completion of this national highway must eventually be of incalculable benefit to the whole country. Already has it brought what had seemed to be remote dependencies of the republic into close fellowship and active commercial relations with the Atlantic States, and brought the vast Pacific slope within easy supporting distance of the nation in case of foreign invasion or internal rebellion.

San Francisco has suffered from the immediate effects of the road in its diverting the channels of travel and trade; but what San Francisco loses will be more than gained by the State at large in its intercourse with the

TUNNEL IN THE SIERRA NEVADA MOUNTAINS.
(215 miles from San Francisco—Altitude 4,574 feet.)

LAKES IN ANDERSON VALLEY, SIERRA NEVADA.
(240 miles from San Francisco.)

East, and in the establishment of commercial affairs upon a safer and more stable basis than has yet been known on the Pacific coast.

The protracted snow blockade on the overland road during the greater part of the months of December, 1871, and January and February, 1872, has demonstrated that but little interruption need be anticipated west of the Rocky mountains. On the entire line of 1,341 miles from San Francisco to Laramie, a little west of the crest of the Rocky mountains, no interruption whatever has been experienced; although in the Sierras the road is 7,017 feet above the sea and snow falls from ten to forty feet in some places.

The whole difficulty with snow on this road has been within a range of two hundred miles of the crest of the Rocky mountains, extending about one hundred miles on each side. Here the altitude is from 7,000 to 8,242 feet, and the fierce gale sweeping over the vast plains and mountains, bald, bleak, and dreary, without tree or shrub to interrupt it, drives snow hardened in its course and mixed with sand and gravel, filling the depressions in the road and banking the plains time and again, defying the feeble efforts of shovel and snow-plow.

## OCEAN, BAY, AND RIVER NAVIGATION.

The inland waters of California are all well supplied with steamboats and sailing craft. The bay of San Francisco is navigated by steamboats—models of superior skill, elegance, speed, and comfort. Ferry-boats ply in all directions from San Francisco about the bay and rivers, and the Sacramento and San Joaquin are navigated by swift and elegant boats.

The inauguration of railroads in the State has relieved the people from the oppressive monopoly maintained for twenty years on the inland waters of California by the "California Steam Navigation Company," which, during that period, had bought off *more than one hundred steamers*, most of which were tied up and allowed to rot along the river banks, while rates of passage and freight were maintained at fabulous and ruinous prices; while "opposition" steamers were bought off or sunk by the soulless corporation, which, while it paid millions to its stockholders, imposed a cruel oppression upon the people, believed in the aggregate to be a fit subject for plunder and insult. During a brief period of "opposition" on the inland waters, passage would fall from ten dollars to one dollar, and even at times passengers would be carried between San Francisco and Sacramento and Stockton for fifty cents each, finally free, and in some instances they were paid a dollar a head to go on certain steamers, where free meals and cigars were supplied to all, and a choice band of music discoursed to happy crowds surrounded with festivities and flying flags. Those were seasons of joy for the "runner," whose hoarse voice and wild grimaces startled and bewildered the unoffending pedestrian, who found himself and "baggage" swooped up and unceremoniously hurled on board the "accommodation" steamer. But these seasons were brief. Soon the "opposition" would quietly lie at the river bank or bottom of the bay, the flags would be lowered, music hushed, the excited crowd and wild "runners" dispersed, and, solitary, silent, and sad, the plodding "miner" approached the narrow plank, at the end of which a savage hireling grabbed his last ten dollars, thrusting him rudely by.

Scores of sailing vessels are also engaged in navigating the inland waters and coast of California, Oregon, Washington Territory, and all parts of the waters north and south of San Francisco, and the islands of the Pacific ocean, Mexico, Central and South America.

Fleets of clipper ships, from all parts of the commercial world, enter and depart through the Golden Gate, freighted with merchandise for California, and carrying away wheat, flour, copper, silver and other ores, hides, wool, wine, and other merchandise.

Ocean steamers run regularly from San Francisco to every harbor of interest in the State, and lines of swift and elegant steamers ply between the city of San Francisco and Oregon, Washington Territory, British Columbia, Alaska, Japan, China, Sandwich islands, Australia, Mexico, and Central America. The steamers running from San Francisco to China, Japan, and Panama, for elegance, speed, and capacity, are unequalled in the world, far surpassing any of the boats running between the Atlantic ports of America and Europe.

On the 5th of May, 1870, the steamship *Idaho* arrived at San Francisco, from Honolulu, Sandwich islands, with freight and passengers which she received on board at the former port from the steamship *Wanga-Wanga*, direct from Australia and New Zealand, being the pioneer voyage of a line of steam communication established between San Francisco and Australia and New Zealand.

## SHIP-BUILDING.

But little has been done in ship-building in California. Some river streams and small sailing craft have been constructed about the Bay of San Francisco, chiefly out of timber taken from old vessels or imported from

Oregon, Washington Territory, or the Atlantic States. The higher rates of wages and exorbitant prices of all material necessary in the construction of vessels would be sufficient to retard this branch of industry in the State; but the most serious drawback, and the one which must prohibit any success in ship-building in California, is the scarcity of the necessary timber so essential in this branch of industry. California furnishes but little timber fitted for ship-building. The oak of the State is of a coarse-grained, scrubby nature, shaky and liable to split very much when exposed to the sun; and the knees and crooks so indispensable in every vessel cannot be found in any part of the State, and must be imported either from the Atlantic States or from Oregon, where an inferior article of fir, cedar, and oak knees and crooks can with difficulty be obtained. The only timber in the State useful in ship-building is the fir of the northern portion of the State, which makes excellent plank for sides and deck.

The whole Pacific coast is destitute of beech, birch, maple, hemlock, juniper, and Canada spruce, all of which supply the material for ship-building in such abundance and excellent quality in Maine and British North America.

Puget sound, in Washington Territory, owing to its deep water and proximity to a better supply and greater variety of timber than is to be found on any other part of the Pacific coast, has the only inducements on the whole Pacific to offer to those interested in naval architecture; but the advance made in the past few years in constructing iron ships in the yards of Great Britain, for the mercantile service, must tend to materially lessen the value of wood for ship-building.

## TELEGRAPH.

California is well supplied with telegraphs. There are over three hundred stations in the State, and communication can be had not only with every point of importance in California but also in Oregon, Nevada, Utah, Washington Territory, and British Columbia; and by the lines at San Francisco, connecting with those across the continent and the Atlantic submarine cable, the Pacific coast is in direct communication with all parts of the American republic and Canada, and also with Europe and Asia. Notice of events transpiring in St. Petersburg, London, and Paris are transmitted to San Francisco and the remotest parts of the Pacific coast, and the people of San Francisco are often treated to events transpiring in Asia, Europe, and the Atlantic side of America before the hour at which they actually take place: this is owing to the geographical position of the country, San Francisco being so far west. To illustrate: the sun rises at London, England, eight hours before it is seen at San Francisco; so that, if an event transpires in England at four o'clock P. M., it is heard of in San Francisco about nine o'clock A. M., or about the hour merchants and others are entering their offices in the morning, or *seven hours* by San Francisco time *before* the event has happened; and the events of London transpiring at noon may be known in San Francisco about six o'clock on the morning before, and the events of five o'clock P. M. in London may be read in the morning papers in San Francisco at breakfast table, six or seven hours before the hour of the day in which they have transpired.

The difference in time between Boston, Mass., and

San Francisco, is about three hours, so that events transpiring at Boston, New York, or any of the Atlantic cities, at noon, daily, are known at San Francisco between nine and ten o'clock in the forenoon of the same day.

During the late civil war in the country, the citizens of San Francisco would read at their breakfast tables, at nine o'clock A. M., of terrible battles having been fought in some part of the South at twelve o'clock, noon, or *three hours before they had taken place*, according to the time in California.

To further illustrate this subject will be found a time-table, showing the time of day at various places on the globe when it is *twelve o'clock, noon, at San Francisco:*

| A. M. | H. | M. | S. |
|---|---|---|---|
| Astoria, Oregon | 11 | 55 | 12 |
| Calcutta, India | 1 | 35 | 56 |
| Canton, China | 3 | 43 | 00 |
| Honolulu, Sandwich Islands, | 9 | 39 | 8 |
| Melbourne, Australia | 5 | 48 | 00 |
| Pekin, China | 3 | 56 | 00 |
| Sydney, Australia | 6 | 14 | 00 |
| Singapore, East Indies | 3 | 8 | 00 |
| Shanghai, China | 4 | 12 | 40 |
| Tobolsk, Siberia | 12 | 43 | 00 |
| Yeddo, Japan | 5 | 30 | 00 |
| Yreka, Cal | 11 | 59 | 30 |
| P. M. | | | |
| Acapulco, Mexico | 1 | 26 | 28 |
| Archangel, Russia | 10 | 50 | 00 |
| Aspinwall, Isthmus | 2 | 50 | 40 |
| Berlin, Prussia | 9 | 3 | 35 |
| Boston, Mass | 3 | 25 | 48 |
| Cape of Good Hope | 9 | 32 | 50 |
| Charleston, S. C | 2 | 50 | 40 |
| Chicago, Ill | 2 | 19 | 44 |
| Cincinnati, O | 2 | 32 | 16 |
| Constantinople | 10 | 9 | 44 |
| Detroit, Mich | 2 | 38 | 12 |
| Eastport, Maine | 3 | 42 | 00 |
| P. M. | H. | M. | S. |
| Fort Yuma, Cal | 12 | 31 | 18 |
| Frankfort, Germany | 8 | 43 | 24 |
| Galveston, Texas | 1 | 50 | 32 |
| Geneva, Switzerland | 8 | 34 | 42 |
| Gibraltar, Spain | 7 | 48 | 44 |
| Halifax, Nova Scotia | 3 | 55 | 36 |
| Havana, Cuba | 2 | 41 | 00 |
| Jerusalem, Palestine | 10 | 31 | 24 |
| Lima, Peru | 3 | 1 | 36 |
| London, England | 8 | 9 | 31 |
| Los Angeles, Cal | 12 | 16 | 30 |
| Louisville, Ky | 2 | 27 | 4 |
| Mexico, Mexico | 1 | 33 | 44 |
| Mecca, Arabia | 10 | 50 | 00 |
| Montreal, Canada | 3 | 15 | 44 |
| New Orleans, La | 2 | 9 | 40 |
| New York city | 3 | 14 | 00 |
| Nevada, Cal | 12 | 5 | 15 |
| Oregon City, Oregon | 12 | 0 | 40 |
| Panama, Isthmus | 2 | 52 | 40 |
| Paris, France | 8 | 19 | 24 |
| Philadelphia, Pa | 3 | 9 | 22 |
| Placerville, Cal | 12 | 6 | 18 |
| Portland, Me | 3 | 29 | 8 |
| Rio Janeiro, Brazil | 5 | 17 | 8 |

| P. M. | H. | M. | S. |
|---|---|---|---|
| Rome, Italy | 9 | 0 | 3 |
| Sacramento, Cal | 12 | 3 | 58 |
| Santa Fe, New Mexico | 12 | 55 | 44 |
| Salt Lake City | 12 | 41 | 40 |
| St. Louis, Mo | 2 | 9 | 4 |
| St. Petersburg | 10 | 11 | 20 |
| Stockholm, Sweden | 9 | 22 | 20 |
| Toronto, Canada | 2 | 52 | 00 |
| Vienna, Austria | 9 | 15 | 35 |
| Washington, D. C | 3 | 2 | 00 |

## POSTAGE AND POST-OFFICES.

Previous to the acquisition of California, there was not a post-office in the territory. The official documents to and from Mexico, as well as the correspondence of the missionaries, were taken by special carriers; and as there were no newspapers published or circulated in the country, there was but little need of postal facilities. The few foreigners in the country would send or receive an occasional letter by some trader or whale-ship touching on the coast.

So soon as the United States asserted authority over the territory, the newspaper press commenced operations, and post-offices were established in the country; but at this early day, and for many years subsequent, all mail matter to the Pacific coast had to cross the Isthmus of Panama, thence by steamer to San Francisco; from twenty-four to thirty days being occupied in the voyage from New York to San Francisco. It generally required from sixty to ninety days from the date of writing a letter to the receipt of an answer by the Isthmus route. Postage on the half-ounce in those days was ten cents, when the distance was over three hundred miles. The arrival of the semi-monthly steamer at San Francisco was an event celebrated by the firing of guns and the ringing of bells, and the signal for a general rush of the inhabitants to the post-office, where long lines of anxious letter-seekers would take their position, "first come, first served" being the rule; and woe betide the unfortunate wretch whose temerity caused him to attempt to break the restless, anxious, swaying line of the gray-shirt brigade swinging in long lines from the post-office windows.

As these lengthening columns swayed and wriggled, sometimes a-half mile in length, great anxiety and impatience were often manifested by persons wishing to get to the all-important window of the post-office; rugged miners, who had not perhaps for a year heard a word from home, and anxious merchants, whose fate depended upon their letters and invoices, seeing no hope of approaching the office for hours, would offer sums to buy out some fortunate one "in the line;" from five to twenty dollars were average prices, but fifty and one hundred dollars were often paid for a good position nigh the window. Prices would be in proportion to the length of the line, or the anxiety of individuals. The expression of countenance of some of those paying highest rates, when forced to leave the window without a letter, is beyond description. "Selling out" in the line soon became a trade, and many an impecunious individual pocketed his ten or twenty dollars three or four times during the day by selling out and hitching on to the line again.

Cases, too, have not been unfrequent where over-anxious individuals, in search of letters, would take their position at the post-office window one or two days before the arrival of the expected steamer, often passing the entire night standing watching the window, and only leaving it when forced to seek food and drink. It often befell these faithful sentinels that, during the brief absence from their post, the steamer's gun would fire, and, after a break-neck race of a few minutes, they would be forced to attach themselves to the extreme end of a line from a quarter to half a mile in length.

Great relief was experienced some years since by the establishment of the "Pony Express," which carried letters from the Missouri river to San Francisco in twelve to fifteen days, at twenty-five cents the half ounce. This express continued to carry letters between the roads building from the East to the West until the completion of the road in 1869; when the rider of the fleet pony dismounted, handed his mail-bags to the rider of the tireless iron-horse, who rides over the posting winds and gallops over the storms of the Sierras.

Mails are now received at San Francisco each day, in seven days, from New York, Boston, and Philadelphia. There are four hundred and fifty post-offices now in California.

## UNITED STATES BRANCH MINT.

In 1854, a United States Branch Mint was established at San Francisco. Previous to this period, much inconvenience was experienced throughout the State for want of a circulating medium. Gold-dust, at sixteen dollars per ounce, was generally received and paid in all matters of business. Individuals had resort to making coins of pure gold, which passed current in the country: of this class were the fifty dollar pieces called "slugs," octagon in form and made of pure gold, but now entirely out of use.

A magnificent granite and free stone building for a new mint, to cost two million dollars when completed, is nigh finished.

The mint at San Francisco has been kept constantly employed since its establishment in 1854, and has issued an aggregate of $306,074,663.98 in gold and silver coin from its opening until the 1st of January, 1872. Of the total mint coinage, $298,245,706.81 was gold and $7,828,957.17 was silver. The coinage of gold and silver for the year 1870 was $20,355,000; and for 1871 it was $20,041,775, of which $18,905,000 was gold and $1,136,775 was silver.

Until within a few years past, twenty-five cents was the smallest coin in circulation in any part of the Pacific coast. More recently, ten cent pieces have gone into use; and still more recently, five cent pieces, although the latter are scarce, and it may be said that, throughout California and the whole Pacific coast, ten cents is the smallest coin in general circulation.

Paper money has never been used to any extent in California, and the Constitution of the State prohibits the making, issuing, or putting in circulation any bill, check, ticket, certificate, promissory note, or the paper of any bank, or the issuing of paper in any form, as money; hence all the banking and business of the country is done in gold and silver coin, the latter being at a great discount and declined if offered in large quantities. The securities and paper money of the federal government, "greenbacks," bonds, &c., are used in many instances in business, and are bought and sold as other securities.

Beside the gold and silver of California, considerable amounts of bullion reach the mint at San Francisco annually from all the States and Territories west of the Rocky mountains—Arizona, Colorado, Nevada, Utah, Oregon, Idaho, Washington Territory, and British Columbia.

The increasing demand for minting facilities on the Pacific coast has induced the federal government, within a few years, to establish a branch mint, in 1864, at Denver, Colorado; one at Carson City, Nevada, in 1869; and one now (1872) in course of erection at Dalles, on the Columbia river, Oregon.

### NAVY YARD.

At Mare island, twenty-eight miles from San Francisco by steamer, and in the direction of Sacramento from San Francisco, the federal government has established the most extensive navy yard in the republic. Thirty acres of land, on Mare island, with an extensive water-front, is owned by the United States: upon this are erected large and substantial brick buildings, for all the purposes of the yard. There is an excellent dry-dock at these works, where all the repairing of the Pacific squadron is done. The works and grounds here have been projected upon a scale adequate to the growing interests of the Pacific side of the republic.

### COMMERCE.

In preceding chapters will be found statements of the commercial transactions of California under Spanish, Mexican, and early American rule. The internal improvements constantly going on in the State, in building railroads, factories, and the varied local industries, together with the establishment of steam communication to all parts of the Pacific coast, the Pacific islands, Asia, and Australia, are fast giving California a prominent commercial position.

In the early history of the State, when gold was the only export, and every article of food and consumption had to be imported, and all the gold was sent out of the country, *exports* presented very formidable figures.

California, in 1853, yielded sixty-five million dollars in gold, and exported fifty-seven million dollars; only two million dollars of which were merchandise. California now yields annually but about twenty-five million dollars in gold. There were over thirty-two million dollars in gold shipped from San Francisco in 1870; but a great portion of this found its way from the adjoining Pacific States and Territories to California, which latter State cannot be credited with more than sixteen million dollars export of gold of her own production, although her product was twenty-five million dollars.

The following table exhibits the annual exports of merchandise and treasure, from the port of San Francisco, from 1848 to and including the year 1871:

| | MERCHANDISE. | TREASURE. | TOTAL. |
|---|---|---|---|
| 1848–50, . | $2,000,000 | $66,000,000 | $68,000,000 |
| 1851, . . . | 1,030,000 | 45,989,000 | 46,989,000 |
| 1852, . . . | 1,500,000 | 45,779,000 | 47,279,000 |
| 1853, . . . | 2,000,000 | 54,965,000 | 56,965,000 |
| 1854, . . . | 2,500,000 | 52,045,633 | 54,545,633 |
| 1855, . . . | 4,189,611 | 45,161,731 | 49,351,342 |
| 1856, . . . | 4,270,516 | 50,697,434 | 54,967,950 |
| 1857, . . . | 4,369,758 | 48,976,692 | 53,346,450 |
| 1858, . . . | 4,770,163 | 47,548,026 | 52,318,189 |
| 1859, . . . | 5,533,411 | 47,640,462 | 53,173,873 |
| 1860, . . . | 8,532,439 | 42,325,916 | 50,858,355 |
| 1861, . . . | 9,888,072 | 40,676,758 | 50,564,830 |
| 1862, . . . | 10,565,294 | 42,561,761 | 53,127,055 |
| 1863, . . . | 13,877,399 | 46,071,920 | 59,949,319 |
| 1864, . . . | 13,271,752 | 50,707,201 | 68,978,953 |
| 1865, . . . | 14,554,130 | 44,426,172 | 58,980,302 |
| 1866, . . . | 17,281,848 | 44,365,668 | 61,647,516 |
| 1867, . . . | 22,421,298 | 40,671,797 | 63,093,095 |
| 1868, . . . | 22,844,235 | 36,358,096 | 59,202,331 |

| | MERCHANDISE. | TREASURE. | TOTAL |
|---|---|---|---|
| 1869, . . . | 20,846,349 | 37,287,114 | 58,133,463 |
| 1870, . . . | 17,769,742 | 32,983,139 | 50,752,881 |
| 1871, . . . | 13,992,283 | 17,253,346 | 31,245,629 |
| Totals, | $207,978,300 | $985,491,866 | $1,193,470,166 |

The exports overland, since 1870, not being included here, makes the amounts appear small. It will be seen by the foregoing how steadily the export of gold has decreased, and how steadily the export of merchandise has *increased*. It may still seem strange to the reader that the aggregate exports of California have *decreased* since 1853. In that year the aggregate export of the State was $56,965,000, against $50,752,881 in 1870—a decrease of $6,212,191 per annum in sixteen years; but it must be remembered that the gold product of the State is forty million dollars *less* per annum now than it was sixteen years ago; and that the mechanical and agricultural industries of the country have to make up this deficit. Besides, the growth in and development of wealth represented in farms, orchards, vineyards, cities, schools, and the aggregate of real and personal property in the State had no existence in 1853, as compared with the present wealth of the State already alluded to. Nor is the wealth of California, as it is to-day, so easily produced as in the times when the gold-fields yielded their first and richest harvest. The *exports* of the early period when almost every thing produced in the State was shipped out of it, and when there were no local industries in the country, if compared with the exports of the present time, will not convey a correct idea of the wealth or prosperity of California.

If the agricultural and mechanical productions of California be compared with the yield of gold in the palmiest days of the State, it will be found that these branches of industry are fast gaining on the richest yields of the State, and completely eclipsing the gold product of to-day.

The agricultural productions of California are estimated at thirty million dollars for the year 1872, and the value of manufactured articles in the State for the same period at thirty-one million dollars, making an aggregate of sixty-one million dollars per annum—a larger sum than has been produced from the mines of California in any one year since the discovery of gold, except the year 1853, and thirty-six million dollars greater than the gold product of the State at the present period. Adding the agricultural, mechanical, and gold products of 1872, we have an aggregate of eighty-one million dollars, or twenty-one million dollars *more* than the annual yield of gold in any year since 1848. If we add to these productions the real estate and personal property of California, valued at three hundred million dollars, some idea of the increasing wealth of the State may be had.

The tonnage entry of the port of San Francisco, for the year 1871, was 3,519 vessels of all classes, including the coasting fleets, and aggregating one million tons. Of the one hundred million pounds of tea finding its way from China and Japan into the United States annually, twenty-two million pounds enter the port of San Francisco, and is transported East by rail.

The completion of the Pacific and Atlantic railroad in 1869 has wrought great changes in the commercial affairs of California, in placing the merchants of the State in constant and speedy communication with the great manufacturing centres of the Atlantic States and

Europe; relieving importers, to a degree, of the tedious and uncertain voyages by the Isthmus of Panama and Cape Horn, and placing the public beyond the reach of the monopolist, whose fortune depends upon the dangers of the seas and the winds that baffle the mariner.

Another change wrought in the commercial affairs of the State is diversion of trade from San Francisco. Previous to the completion of the railroad, San Francisco was the only outlet in the State. Every person leaving the coast, either for Europe or the Atlantic States, was obliged to come first to San Francisco; so all the merchandise, intended for the State, had also to enter San Francisco. Now persons in the interior take the cars at their homes along the road; so the interior merchants, from the Bay of San Francisco to Utah, order their goods overland, having them dropped at the stations along the road, much to the detriment of San Francisco, which, owing to the causes here mentioned, has great cause, at least for the present, to regret the completion of a road, which, while it redounds vastly to the benefit of the State, has temporarily prostrated the business of the merchants of San Francisco.

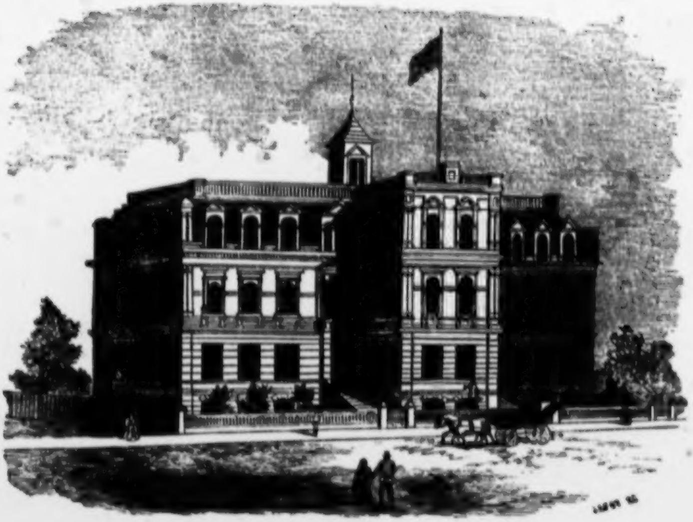
Among the articles of export of the State, in 1871, were seven hundred and fifty thousand gallons of wine and eighty thousand gallons of brandy, a great portion of which went East to all parts of the Atlantic States by rail.

## CHAPTER XXVI.

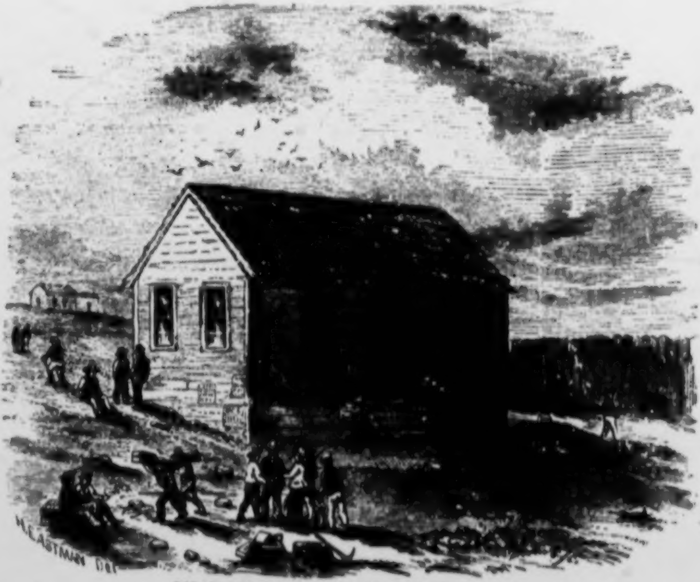
Education—Free schools—Schools in San Francisco—Cost of School Department—Chinese schools—Indian slaves—National education—Agricultural colleges—State university—Agricultural societies—Reform, deaf, dumb, and blind schools—Newspapers—Books—Libraries—Literature—Protective and benevolent societies—Religion—Prisons and crimes—Asylums—Governors of California—Laws—Lawyers—Doctors—Divines.

THE American pioneers of California, although far from the seat of civilization, had not forgotten the early precepts of their ancestors, that the foundations of American freedom were laid upon the universal intelligence of the people; so that, in the moulding of the new State from the crude fragments of a Spanish semi-civilization into well-ordered and active progress, and building up the pillars of the new nation on the Pacific, the spirit and genius of ripest progress are visible, and most effectually woven into the fabric of the organic law of the State.

The free school system, established by law in 1851, has extended to every county, village, and town in California; and the neat school-house in the remote interior, on every hillside and valley, with efficient teachers, trained in the Normal school of the State, affords ample facilities to every child, regardless of race, color, or birthplace, to obtain a free education. In all the departments of public education, California is second to no State in the Union. At the heads of the educational departments, generally, are found men of character and culture, and the teachers, as a class, are equally competent as the teachers in any of the At-



LINCOLN SCHOOL HOUSE, SAN FRANCISCO, 1873.
(Accommodation, 1150 Boys. Cost $100,000.)



FIRST SCHOOL HOUSE IN SAN FRANCISCO
(On Portsmouth Square, 1847.)

lantic States; and the school buildings generally are large, elegant, and comfortable, and, in San Francisco, are not surpassed in capacity and appointments in any city in the Union.

In the public institutions of the State not only are the ordinary branches of an English education taught, but in the cities cosmopolitan schools are maintained, where foreign languages form a part of the instruction.

Besides the other educational institutions maintained by the State is a *university*, established at Oakland, where a full college course is afforded free to all who choose to enter. There is also a law and medical school attached to this institution. A *State Normal school*, with all the modern improvements, and of most spacious and elegant dimensions, recently built at the beautiful city of San José, fifty miles south of San Francisco, educates and graduates, as professional teachers, those of both sexes who enroll themselves for that profession. There is also a reform school at San Francisco; and an educational institution for deaf, dumb, and blind (the only one west of the Rocky mountains) a short distance from Oakland.

San Francisco, the great metropolis of the Pacific coast, with its 149,473 inhabitants, (1870,) has become famous for its public school institutions; and at the present period presents a striking illustration of the progressive genius of the cosmopolitan population of that youthful but expanding city.

Prior to the occupation of California by the Americans, not a school existed in the whole country, except those maintained by the Jesuits for the conversion of the Indians; but no sooner had the stars and stripes floated over the land than institutions of free education and free worship clustered around the dwellings of the pioneer.

The first American school established in San Francisco was a private one, opened in April, 1847, by Mr. Marsten, who is entitled to the honor of being the first "Yankee school-master" on the Pacific coast. The school was opened in a little shanty, to twenty or thirty pupils. In the fall of 1847, the citizens of San Francisco organized a public school and erected a small one-story school-house.

This humble building subsequently served for a church for the first preaching of the Protestant religion in California, the first theatre, court-house, station-house, &c.

On the 3d of April, 1848, the Rev. Thomas Douglas opened a private school; organized, however, as a public school. The summer of 1848 found Douglas' school closed, and all the pupils large enough to travel, parents, and teacher on the march to the gold-fields of the rivers and gulches of the foot-hills of the Sierras. On the 23d of April, 1849, the Rev. Albert Williams opened a select school, which he taught for a few months only; and, in October following, Mr. and Mrs. J. C. Pelton opened a private school, which, in April, 1850, was made a public school, and Mr. Pelton and his wife were employed by the common council of the city, at a monthly salary of five hundred dollars. From this period forward to the present time, San Francisco has gone steadily onward in her public schools, until her beautiful school edifices adorn every hill-side and look out upon the placid waters of the Pacific ocean from every quarter.

On the 30th of June, 1870, there were 45,617 children in San Francisco under fifteen years of age; of whom 27,055 were between the ages of five and fifteen years. To accommodate these there were fifty-eight public schools; three hundred and sixty-nine teachers—three hundred and twelve females and fifty-four males. The amount expended in the city for public school purposes during the year ending June 30, 1870, was $522,500 in gold; and the total expenditure for this purpose in the city for the eighteen years of the existence of free schools in San Francisco, to the beginning of 1871, was *four and a-quarter million dollars.*

Many of the school buildings in San Francisco surpass in elegance and capaciousness the schools of any Atlantic city. There are seven hundred and twenty pupils taught in a school building on Silver street, the *Rincon school* (girls' grammar) has six hundred young lady pupils; *Lincoln school*, named after Abraham Lincoln, is exclusively a boys' school, and numbers 1,150 pupils; the *Denman school* (girls' grammar) has seven hundred young ladies; and other school buildings of great capacity are in contemplation and are being constantly erected.

Colored or negro children have a separate school, at which one hundred and forty-five children are taught.

San Francisco maintains one school for the Chinese: this is the only free school maintained on the continent for the education of this race. The number of Mongolian children in the city under fifteen years of age in (1870) 1,148, and the number of persons attending the Chinese school (many of whom are grown men) is two hundred and two. A library of 8,510 volumes and valued at $10,469—the property of the public schools of San

Francisco—is in the rooms of the Board of Education of the city.

To convey a further idea of the extent to which public instruction is carried on in San Francisco, and the vast sums so willingly spent in the cause of education, a comparison between the value of public school property in the progressive city of Chicago and San Francisco may serve to illustrate. At the end of 1870, the population of Chicago was 299,370, and that of San Francisco, 149,473. At this period the total valuation of the public school property of Chicago was $1,873,375; while San Francisco, with a population of only about half that of the former city, possessed in its public school department property to the value of $1,729,800—double as much in proportion to its population as the school property of Chicago.

The report of the State Superintendent of Public Instruction to 1870 shows that there were 1,144 school districts in the State, with 1,268 schools, in which there were employed 1,687 teachers—970 males and 730 females. The number of pupils enrolled was 73,744, and the average attendance of pupils, 56,715.

The whole number of children in the State at that period, between five and fifteen years of age, was 112,743, of whom 57,374 were boys and 55,369 were girls. Of this number 110,642 were white—56,264 boys and 54,378 girls; and 838 negroes—432 boys and 406 girls. There were also of this number 1,263 Indian children—678 boys and 585 girls—living under the guardianship of white persons. There were also at this period 57,983 children in the State under five years of age—57,410 whites, 278 negro, and 295 domestic

Indians; making a total of 170,726 children of all classes under fifteen years of age in the State in 1870.

Of the 112,743 children between the ages of five and fifteen years but 67,834 had attended the public schools at any time during the year; of whom 67,307 were whites, 406 colored, and 121 Indians. There were at the same time attending private schools 16,273 children between five and fifteen years of age—16,159 whites, sixty-nine colored, and forty-five Indians—making a total of 84,107 children of all classes between five and fifteen years of age attendant at school, and leaving 28,636 of these ages who never enter a school.

It will be seen that of the 838 colored children in the State but 475, or a little over one-half, were attending school; while of the 1,263 Indian children between the ages of five and fifteen years, said to be under the guardianship of whites, but 166 ever entered a school, leaving 1,097 without instruction. The fact is, that the greater part of these Indian children were bought from some of the tribes in the State and throughout portions of Oregon and Washington Territory, or kidnapped by some of the traders on the coast; and are held as slaves, without knowledge of parents, relatives, or kin.

The number of Mongolian (Chinese) children in the State at this time, under fifteen years of age, was 1,470. There were seventy-nine deaf and dumb children between the ages of five and twenty-one years, and thirteen blind of the same age. The total valuation of the school property of the State was $2,796,705.12, and the State expenditure for the school year of 1869 amounted to $1,290,585.52 in gold.

Sunday-schools, under the direction of zealous and competent teachers, are maintained throughout the whole Pacific coast; there being over two hundred Sunday-schools, with more than twenty-five thousand scholars, and four thousand officers and teachers, in California. There are in the State ten Sunday-schools for Chinese, having 363 teachers and 1,640 scholars, and an average attendance of 552. Most of these Chinese schools are in San Francisco, and are maintained by the different church organizations. The efforts of the teachers are chiefly directed toward teaching the English language. All the scholars in these schools are exclusively males, and many of them men of middle age. No female child or Chinese woman enters any school in California; and no Chinese women, with but few exceptions, engage in any occupation or employment save the plying of their vile and nameless profession.

### NATIONAL EDUCATION—THE ESTABLISHMENT OF AGRICULTURAL COLLEGES IN THE UNITED STATES.

In the year 1862, Congress passed an act entitled "An act donating public lands to the several States and Territories which may provide colleges for the benefit of agriculture and the mechanic arts," which was approved, July 2, 1862, by President Lincoln; and which granted to each State, for such purpose, thirty thousand acres of land for each Senator and Representative in Congress, according to the apportionment under the census of 1860, amounting in the aggregate to 9,510,500 acres. Besides these donations, Congress has, by donating the sixteenth and thirty-second sections in the States for school purposes, granted 69,066,808 acres directly, and for internal improvement (generally given to the educational fund) granted an additional 13,669,671 acres: thus making a total of 92,246,979 acres (up to 1871) of the public domain donated to the cause of education in the Union. The act provides that all moneys realized by the sale of these lands (agricultural college) shall be invested in stocks of the United States, or of the States, and that only the interest thereof shall be expended for the purposes named. The Legislature of each State which accepts this bequest must establish one college of agriculture and the mechanic arts, erect suitable buildings, choose a faculty of professors, and prescribe such a course of study as will have a tendency "to promote the liberal education of the industrial classes in the several pursuits and professions of life," by making the leading feature and objects of such instruction to be "to teach such branches of learning as are related to agriculture and the mechanic arts," including "military tactics," and not excluding "other scientific and classical studies." The design of Congress appears to have been to establish a national American system of education for the benefit of the whole people.

The Legislatures of twenty-three States have responded to this magnificent donation of Congress, and have either established or commenced agricultural colleges. The following States have organized independent institutions: Michigan, Pennsylvania, Iowa, Illinois, Massachusetts, and Maine. The following States have incorporated their agricultural colleges with other seminaries or universities: Connecticut, Kentucky, New York, New Jersey, Vermont, Kansas, Maryland, California, Delaware, Minnesota, New Hampshire, Rhode Island, Vermont, West Virginia, and Wisconsin. The States of Ohio and Indiana have accepted the donation; but, as yet, have only commenced. The first six States have farms of from four hundred to one thousand acres attached to their agricultural colleges.

On the 23d of March, 1868, an act of the Legislature of California organized a *State university*, and accepted the munificent donation of one hundred and fifty thousand acres of land granted by the National Congress for the establishing and maintaining of a college of agriculture and the mechanic arts, &c.

The university was opened on the 23d of September, 1868, and about fifty students had entered up to the beginning of 1870.

This institution has its location at Berkeley, about four miles north of Oakland, in Alameda county, and directly facing the Golden Gate. The buildings are constructed upon the most improved modern principle, and are located in a park of two hundred acres, beautifully situated and ornamented with shade and other trees.

In point of equipment the University of California is superior to any in the Union, as its apparatus was selected from the most approved modern styles in England, France, Germany, and America, and many valuable appliances of modern invention introduced which will materially aid in developing and illustrating branches of science heretofore not supposed to be susceptible of illustration by artificial means.

Law, medical, and agricultural departments are connected with the university; and these, with all the departments of the institution, are open to both sexes alike who can pass the necessary examination in scholarship and character.

The practical workings and beneficial effects of the study of the science of agriculture, as comprehended in the act of Congress establishing and fostering agricultural colleges, cannot be doubted, when we reflect that in no branch of industry is there such widespread ignorance as in the noble pursuit of agriculture—no branch of industry wherein thrift, education, and systematized labor combined with the application of science so readily reward the laborer; and California, whose generous soil and genial climate place her in the front rank of the most favored sections of the globe, would seem the most fitting place to bring to unequalled perfection the productions of the soil and the science and practice of agriculture.

It is truly encouraging to see at last so deep an interest manifested in this sadly neglected and noble industry as exhibits itself in the generous aid afforded it by the national and State governments. Many of the States in the Union have taken steps to instruct their young men in the *science* and *practice* of agriculture, many of them having State agricultural colleges, with farms attached.

The earliest effort to establish an agricultural school was made in 1775, by the Abbé Rosier, who proposed to the French minister, Turgot, to place at his disposal the park of Chambord. But to the enthusiastic efforts of Emanuel Fellenberg, who, in 1799, established upon his estate of Hofwyl near Berne, in Switzerland, an agricultural school, is the world indebted for its advanced state of agricultural information founded upon combined science and labor.

In the year 1799, the Prince Schwarzenberg founded an agricultural school at Krumau, in Bohemia, on a domain of three hundred thousand acres, which is still in successful operation. The collections at this famous school comprise models of agricultural implements, philosophical and chemical apparatus, insects, fruits, the cultivated plants of the country, minerals, and a herbarium. Beside these, there are a botanical garden, conservatory, and an astronomical observatory. The instruction is gratuitous.

In many parts of Europe there are agricultural schools in which instructions are given in botany, zoölogy, mineralogy, geology, mathematics, chemistry, physics, mechanics, agriculture, sylviculture, and the working of mines; and wherein the students are brought into actual contact with every department of practical labor connected with farm-work. They plough, harrow, dig, cultivate, plant, sow, hoe, thresh, graft, prune, take care of teams and stock generally, lay out and superintend work, erect farm-buildings, keep accounts, and perform every duty of a practical farmer. Students occupy a term of from three to five years, and after a rigid examination are, if qualified, graduated.

It is in such institutions as these, in our own country, that the parents of California should place their sons, instead of crowding them into law, medical, and theological schools, offices and stores, or permitting them to join the great and ever increasing army of shiftless idlers growing up in the land, who seek a precarious subsistence by clinging to the skirts of some overcrowded profession, vend small wares, or live in absolute idleness and vice, while millions of acres of generous soil only await the touch of industry to bounteously reward its possessor.

Scientific agriculture is but in its infancy in the United States. In portions of New England and the Middle States, where population begins to cut up the land into small farms, and the proximity of markets renders the productions of the soil of great value, considerable attention is being paid to manuring the land and rotation of crops; but throughout the West, and particularly west of the Rocky mountains, as a rule, the greatest ignorance and recklessness in the cultivation of the soil exists, many farmers entirely ignoring the idea that any thing will grow upon their farms except wheat, others grow only barley, and others again only corn or potatoes. The *wheat* farmer buys the barley and oats upon which he feeds his horses and the vegetables upon his table; while the *barley* farmer buys his flour and vegetables. The stock-raiser, who counts his horned cattle by the thousands, buys his butter, cheese, and bacon; while the *hog* farmer buys every thing, even bacon and lard, and, strange as it may seem, hundreds of men throughout the West drive their hogs to market, sell them on the foot at three and four cents per pound, and carry home ham at twenty to thirty cents a pound.

Year after year the land is sown in the same seed, without manure or a season's rest, until finally the soil exhibits signs of exhaustion, and eventually refuses to produce at all, much to the surprise of the "farmer," who must seek "better land."

Within some years past, agricultural societies formed in most of the States have aided much in disseminating practical facts to farmers. But systematized and scientific agricultural education has been slow in its progress.

The scientific schools attached to *Yale*, *Harvard*, and *Dartmouth* colleges each provide for instruction in some of the branches of agricultural science, and have proved of great advantage to those availing themselves of their benefits; but the want of experimental farms has been much felt at these institutions.

As early as 1837, the subject of establishing agricultural schools was agitated in the States of Pennsylvania and New York; but, up to 1853, no practical form had been given to the subject. In this year, the State of Pennsylvania projected her present flourishing agricultural college. The State of Michigan, in 1855, established an agricultural college, appropriated fifty thousand dollars, and purchased a tract of seven thousand acres of land for this purpose. In 1857, a further sum of forty thousand dollars was appropriated by the Legislature, and in May, 1857, the first class was admitted.

Throughout the United States agricultural societies and colleges are fast increasing, and their beneficial effects extending to every State and Territory in the Union. In 1862, the National Congress established a distinct department of agriculture, with a commissioner at its head, for the distribution of seeds, roots, &c., and general information free to the people.

West of the Rocky mountains, besides the stimulus given to agriculture by the appropriations of Congress already alluded to, the States and most of the counties have agricultural societies.

In 1862, the State of Oregon, by its Legislature, incorporated an agricultural college at Eugene City; and the State agricultural society of that State, which has a meeting annually at Salem, exerts much influence upon the agricultural interests of the State and the prosperity of the people.

On the 14th of June, 1870, "The Columbia District Agricultural Society" was organized at Dalles City, Oregon. This society will embrace all of Oregon and Washington Territory lying east of the Cascade mountains.

Industrial School.—A school for the reformation of juvenile offenders of both sexes is established at San Francisco. During the year 1868, the inmates of the State Reform school, at Marysville, were transferred to this institution, and the State Reform school abandoned. Unfortunate children, without the wholesome control and guardianship of parents, and those abandoned to their own resources, or who inherit the low cunning, crime, and viciousness of wretched parents, swell the ranks of idle, unwashed urchins, who, in the genial climate of San Francisco, congregate under and about the wharves and city front, subsisting upon stray scraps and the fruits of pilfering, and afford abundant material for this institution and for the State prison.

Deaf, Dumb, and Blind.—The State has recently erected in Alameda county, about four miles north of the city of Oakland, at a cost of one hundred and fifty-eight thousand dollars, an institution for the care and education of the deaf, dumb, and blind. It is the only establishment of this character on the Pacific coast, is built upon the most improved plan, and has capacity to accommodate all those persons upon the Pacific coast who may find it necessary to enter it. From the 1st of October, 1867, to 1870, but ninety-six persons were admitted to this institution—sixty deaf and dumb and thirty-six blind. Persons between the ages of six and twenty-five years are entitled to admission.

## NEWSPAPERS, BOOKS, LIBRARIES, AND LITERATURE.

There is not a State in the Union nor a country in the world whose people, as a class, is so well educated, enlightened, and progressive as the people of California. The first settlers of the State were generally engaged in active life in their early homes; persons of energy, ambition, and generally better educated than the mass of their countrymen. Misfortune in business, and a restless and uncontrollable desire to gain riches, together with the spirit of adventure, drew to the Pacific coast the mass of its population. Many of the early comers were compelled to make long and expensive voyages by sea, and tedious journeys by land, often through foreign countries and amidst scenes and circumstances which, of themselves, formed a most interesting and salutary chapter in the history of their lives. On their arrival in California, new and strange fields of industry were opened up to them. Men of culture and letters were found in the employments allotted to menials in the older-settled parts of the world, and these men, located throughout the country in farming, stock-raising, lumbering, mining, and other industries, and engaged in the various trades and business of the cities, form the mass of liberal-minded,.intelligent men who have broken down the barriers of superstition and staid conventionalities of sectarianism, and established a social and mental activity commensurate with the age, and in happy contrast with the narrow prejudices and sectional strifes of many of the older-settled sections of the country.

Civilization, in its westward march, is no longer guided by the rude trapper and axeman, but pushed ahead by the refining and enlightening influences of the school-house and printing-press, whose presence and power are felt in every home throughout the wide expanse of the Pacific slope.

As early as the year 1860, when California was but ten years old, as a State, and her whole population but 379,994, her newspaper circulation, in proportion to her population, was the largest in the world, far surpassing any part of New England and Europe. At that period the annual circulation of newspapers in the United States was thirty to each person. The average in the fifteen slave States was but fourteen. In California the issue was sixty-nine to each person—*more than double that of the average of the whole country*, and *five times* as great as that of the slave States. Besides the issue of papers from the press of the State, as here indicated, a greater amount of reading matter from the Atlantic States and Europe—newspapers and magazines—is received in California, in proportion to the population, than is received in any other State in the Union from abroad. So, too, with letters: the letter mails of California are larger, in proportion to the population, than the mails of any other State in the Union or any other part of the world.

There are published in the State of California one hundred and seventy newspapers and magazines of all classes, sixty-seven of this number being published in the city of San Francisco. The foreign residents in San Francisco publish and maintain newspapers in German, French, Spanish, and Italian; also, one one-half in Russian, and a monthly issue in the Chinese language for circulation in Asia.

The newspaper press of the State, in many instances, is conducted with much spirit and ability, and is most liberally patronized by the business community as an advertising medium. In California everybody reads newspapers. On the street-corners, hand-cartmen, hackmen, and draymen seem to devour the contents of the daily papers; while the stage-driver and expressman throughout the valleys, gulches, and ravines, as he speeds his way, is ceaseless in flinging right and left wads of newspapers at the door of every farm-house, store, inn, cottage, cabin, and footpath which leads to the dwelling of some hermit, secluded in the jungle, ravine, or gulch, where he lives chasing the deer or hunting for gold.

In the field of authorship and bookmaking, California has not been behind her sister States. More than one hundred different books have been written in the State; some of them ponderous octavos, and embracing history, poetry, fiction, religion, education, agriculture, mining, politics, and a variety of miscellaneous subjects. This number does not include the statutes and State Supreme Court Reports.

Throughout the State, and in all the cities and towns, there are a number of literary societies and libraries; but there is not a *free* library of any description in the State.

There are sixty-three libraries in California, with over two thousand volumes each, of an aggregate of one hundred and seventy-five thousand.

The State library at the capital, Sacramento, contains about thirty thousand volumes, chiefly law. It is not a circulating institution.

The library of the Mercantile Library Association of San Francisco contains about twenty-eight thousand volumes, which circulate among its members. Commodious reading-rooms, well supplied with papers from all parts of the world, are attached for the convenience of its patrons.

With books pertaining to the early history of California, the Pacific coast generally, and the islands of the Pacific ocean, the Odd Fellows' library of San Francisco is perhaps the best supplied of any in the United States. It contains about twenty thousand volumes.

In the library of the Mechanics' Library Association of San Francisco there are about sixteen thousand volumes of well-selected books; and the public school department of San Francisco owns a library of eight thousand five hundred and ten volumes.

There are about five thousand five hundred volumes in the Young Men's Christian Association library at San Francisco; and the library of the San Francisco *Verein* contains four thousand two hundred volumes.

The Society of California Pioneers have elegant reading-rooms, and a small library of some two thousand five hundred volumes.

HOME FOR THE CARE OF THE INEBRIATE.—Besides the thousands of drunkards' homes, in saloons, out-houses, wharves, streets, and dwellings, where wives, sisters, and mothers are made the unwilling guardians of the drunkard, an institution called the *Home of the Inebriate* has been established in San Francisco, supported in part by contributions and aid from the State. In the two years ending January 1, 1870, there had been admitted five hundred and thirty-seven persons to this institution—four hundred and seventy-three males and sixty-four females. As in the State prison and insane asylum, foreigners preponderated. Of the total number (five hundred and thirty-seven) but two hundred and thirty were Americans; while three hundred and seven were of foreign birth—Ireland, as in the State prison and insane asylum, taking the lead: Ireland, one hundred and ninety-five; Germany, thirty-three; and Scotland, thirteen.

### BENEVOLENT AND CHARITABLE INSTITUTIONS.

Benevolence and charity are leading traits of character of the whole people of California. Long voyages by sea and tedious journeys by land, restless nights, hard fare, privations, and poverty at some time in the lives of most have worked the sordidness out of their souls, and touched the generous fountains which never fail to yield their pure and copious flow of charity: not miserly, begrudging charity, but hearty, generous, liberal aid, that makes the heart of the giver glad and the spirits of the receiver light.

In this land, where, from the earliest settlement of the country, the mutual exchange of a pot of beans, a piece of bacon or venison, and a night's lodging has been regarded a sacred duty, and where the sudden revulsions of life have taught men how fickle are riches, charity, either in its organized forms or individual character, meets with most generous recognition from all classes in California.

Throughout the State, in every town and village, there are organized societies for the dispensation of aid to the poor and afflicted. In San Francisco alone there are one hundred and fifty benevolent and eighty protective societies.

In California the objects of charity are not of the classes found in older settled countries—old people and children; for, although some of these classes are now to be found in destitution, men and women in the prime of life, destitute of every thing but poverty, are often compelled to seek temporary relief; so that, from the year 1849 to the present day, men and women, out of employment and out of money and a home, may be seen in the streets, stores, and offices of every town in the State begging for alms. In many instances, when people are found to respond generously, their kindness is taken advantage of by those who make a *profession* of begging. A couple of well-authenticated cases which recently occurred in San Francisco will illustrate the extent to which professional begging is carried on in California. A man with a sorrowful face called upon the head officer of a benevolent society, stating that his child was dead and that he had no means of defraying the expenses of the funeral. A charitable lady was despatched with him to the scene of mourning, when the fellow, after leading the lady several blocks, ran at full speed in an opposite direction and was soon out of sight. In another instance, a young girl in tears applied at a benevolent institution, stating that her father was dead and her mother and little brothers and sisters in destitution, and without the means of burying the husband and father. An amiable lady was sent with the girl to learn the true state of the case. On arriving at the wretched abode of the family, sure enough the father was dead and lying in a rude coffin, surrounded by his weeping wife and children. The case was one of great distress, and the good lady from the benevolent society emptied her purse into the lap of the tearful wife and mother, and took her departure to procure further aid for the family and provide for the burial of the unfortunate man. After her departure from the house, and before she had gone many steps, she found that she had forgotten her handkerchief, which she had held to her weeping eyes in the house of the distressed family; so she quickly retraced her steps and quietly entered, only to see the "cold corpse" sitting up in his narrow coffin counting his coin.

To those not familiar with the uncertainties, privations, and trials incident to a new country, it is difficult to understand why there should be poor people in a land like California; but the causes of temporary or even painfully protracted poverty are well understood by all Californians. San Francisco, containing one-fourth of the whole population of the State, and the main depot for all new-comers, although the seat of much wealth, luxury, refinement, and pleasure, is also the seat of great distress, vice, and poverty, which keeps the city hospital, almshouse, and numerous charitable institutions taxed to their utmost capacity. It is estimated that more than twenty thousand persons annually receive public charity in the city; one institution alone—*the San Francisco Benevolent Society*—having during the year ending December 31, 1870, aided 7,969 persons, at a cost of $22,488. Owing to the mild climate, the pains of pinching frost are not added to penury; but poverty in any of its forms is bad enough. In San Francisco there are at least five thousand men and boys who roam about the city, picking up a living from the contents of milk-cans and bread stolen from the doors of dwellings, the dregs of beerkegs, and such pickings as they can obtain about the lunch-tables of saloons. Of this number, but few ever see fire or light, eat at a table, or sleep upon a bed; but find shelter about the wharves, in hogsheads, coal-yards, sheds, stables, lumber-yards, and even upon the sidewalks.

## RELIGION.

Weighed in the scale of orthodoxy, the people of California as a class cannot be considered religious, although there are many large and influential religious organizations and devout Christians, and zealous *religionists* who follow the Mosaic star or the philosophy of Buddha and Confucius. As in most parts of the West, materialism with widespread *indifferentism* seems to offer easy avenues and a welcome retreat from the trammels and *anathemas* of self-ordained rulers, and the hidebound dogmas and proscriptions of feeble-minded fanatics and bigots, who breathe only in the fetid and sulphurous atmosphere of ritualism and the torments of eternal fire.

Swinging a pick, rolling a wheelbarrow, and washing dishes in the mines, with scanty meals of salt bacon and beans, washing a dirty shirt with blistered hands, and travelling long, dusty, and lonely roads with an empty stomach, have been found most efficacious in working the superstition and other nonsense out of a large portion of the able-bodied men of California.

The early teachings of the Jesuit and Franciscan fathers have had but little effect upon the heathen; and at this period nearly every vestige of their former labors and of the native Indians of California, has disappeared.

In California, as in most Spanish and Catholic countries, all forms of religious worship except Catholicism were prohibited by law; and, previous to the year 1848, no form of Christian religion save that taught by the Catholic missionaries had ever been preached in the land. In the summer of 1848, the Rev. T. Dwight Hunt, a Presbyterian missionary to the Sandwich islands, arrived at San Francisco, then a scattering village of two hundred rude adobe houses. He was elected "chaplain of the town;" and commenced preaching to a few persons in a small house occupied during the week by a school, taught by Thomas Douglas. Mr Hunt, who was the first Protestant minister in California, continued preaching in San Francisco; and was, on the 29th of July, (Sunday,) 1849, elected pastor of the "First Congregational church," which office he held until the first Sunday in January, 1855, when he resigned his position and left for the Atlantic States, where he is still (1872) engaged in his Christian ministrations. At the installation of Mr. Hunt, as pastor of the First Congregational church, which took place on the 26th of June, 1850, were Revs. J. A. Benton, S. V. Blakeslee, S. H. Willey, and O. C. Wheeler.

Although Rev. Mr. Hunt had commenced his ministrations in 1848, no *church organization* had been effected until the third Sunday in April, 1849, when the Rev. S. Woodbridge, who arrived at San Francisco on the 28th of February, assisted by the Rev. Albert Williams, organized and established, at Benicia, *the first Protestant church organization in California.*

Rev. S. H. Willey, subsequently acting chaplain of the town of Monterey, with Rev. Mr. Woodbridge, arrived at San Francisco on board the first passenger vessel with gold-seekers bound for California.

The second Protestant church organization in California, and the first in San Francisco, was the First

Presbyterian church, organized by the Rev. Albert Williams, on the 20th of May, 1849. Mr. Williams had arrived at San Francisco on the 31st of March, 1849, on board the steamer Oregon, the second passenger steamer which had arrived with gold-hunters. The *Second* Protestant church organization in San Francisco was the First Congregational church, presided over by the Rev. T. Dwight Hunt, already alluded to.

The people of California have been peculiarly favored in having in the ministry, from the earliest period of American possession to the present time, a large class of those whose example, influence, fidelity, virtue, and sterling labors for the promotion of their fellow-men have endeared their names in the memory of thousands, and who did eminent service to their adopted State, their country, and religion.

Omitting atheists, pantheists, Mormons, deists, spiritualists, free-lovers, the disciples of Buddha, and other "believers" and "unbelievers," the organized religious bodies of the State are represented as follows:

The Roman Catholic Church numbers in California one archbishop, one bishop, one hundred and twenty-four priests, twenty-nine students for the priesthood, one hundred and two houses of worship, beside forty-seven chapels and stations, thirty-six schools, including five colleges, in all having over eight thousand pupils. It has also six asylums, four hospitals, and eight convents. It holds enormous properties, draws heavily upon the purses of its members, and works its affairs with the precision of machinery. Saddlier's *Catholic Almanac* for 1870 estimates the Catholic population of the diocese of Monterey and Los Angeles at thirty thousand; and the whole number in the State can hardly fall short of one hundred thousand.

The Methodist Episcopal Church has in California one hundred and thirteen preaching stations, one hundred and twenty preachers, (including probationers,) five thousand two hundred members, and one hundred and forty-six Sunday-schools, with nearly nine thousand scholars. It has also ninety-three church buildings and fifty-five parsonages, valued at $990,000. The University of the Pacific owns a valuable property near San José.

The Methodist Episcopal Church South has fifty societies, fifty-one ministers, 3,385 members, twenty-three church buildings, and twenty-three parsonages, valued at $110,000. They have a prosperous college at Vacaville, Solano county, and an academy at Visalia. The Methodist bodies comprise nearly a third of the Protestants in the State.

The Old and New School Presbyterians have effected a union. In California they have eighty-eight preachers and forty-two churches, with 2,600 members and 3,500 Sunday-scholars.

The Cumberland Presbyterians claim twelve hundred members, chiefly in the interior counties.

The Congregationalists, who differ from the Presbyterians chiefly in the simple democracy of their church government, report forty-nine ministers and forty-eight churches, with a membership of 2,121, and 5,178 Sunday-scholars. They hold church property valued at $271,000, including thirty-two houses of worship.

The Baptists, who are also Congregational in government, have fifty-eight ministers and sixty-two churches, with three thousand members.

The Disciples—a branch of the Baptist family—probably number two thousand or more.

The Episcopalians report forty-five clergymen and thirty-four churches, with about two thousand communicants and 2,600 Sunday-scholars. They have a theological school at Benicia, with a dozen students, and are zealous for the establishment of schools in every parish, distrusting the public schools as unreligious.

The Unitarians have four congregations and four ministers, with a probable Sunday attendance of one thousand or twelve hundred, and a scattered constituency of several thousand more.

The Swedenborgians, or Church of the New Jerusalem, have two small congregations in San Francisco; and there are several minor sects represented in the State.

There cannot be less than ten thousand Jews, who hold fast to the ten commandments and the worship of the Living One, though they have only three or four synagogues.

In round numbers, the Protestants have four hundred churches, four hundred ministers, twenty-five thousand members, and twenty-five thousand children gathered in Sunday-schools, with a probable attendance at Sunday meetings of twenty-five thousand persons who are not counted as members, making in all a population of seventy-five thousand who are directly under this form of religious instruction and influence in California.

Of the Catholic population not more than seventy-five thousand are likely to be reached by the efforts of the priests, making a total of one hundred and fifty thousand nominal Christians.

## PRISONS, CRIMES, ASYLUMS, CHARITIES, &c.

Prisons and asylums are doubtless the last institutions that could be thought of by the fortune-seekers who look toward California and sigh to grasp her golden treasure. But such institutions, the accompaniments of "civilization," are found even in California.

The rapid acquisition of fortunes, founding of civil government, establishment of religion, education, and refinement, have not been the sole aim and occupation of those who visited California, as can be attested by the terrible calendar of crime and the ever-lengthening column whose gory sides still run with the life-blood of the victims of the murderous knife and pistol; and the cry for more room to accommodate the ever-increasing throng who unwillingly seek an admission into the expanding jails, prisons, and asylums of the State.

If California can boast of her virtuous, industrious, honest, and progressive men and women, so, too, she may mourn over her corrupt, idle, vicious, profligate, and criminal rabble, who, trampling under foot every impulse of manhood, virtue, honesty, and industry, seek only by crime to subsist at the sacrifice of the lives, property, virtue, and peace of their fellow-beings; and as California can boast of her success, activity, mental and moral forces, quickened and propelled by the cosmopolitan nature of her population, her genial climate, and invigorating atmosphere, so she can look with horror upon her *intensified* crime, the result of the same natural causes.

Crime, at best, in any of the States of America or portions of Europe, where but a single race of mankind live, is bad enough; but where the concentrated sin and villany of every portion of the world meet in their concrete and angular forms it is appalling; and in no other portion of the globe, outside of California, does crime assume so many and such loathsome forms. Here the highwayman and mountain-robber are represented by the daring and boldness of every race of men. The horse-thief has the dash and agility of Europe, Asia, and America. The desperado comes from every part of America, Asia, Europe, and the islands of the seas; and the professional burglar has picked locks in both hemispheres: the ponderous doors of mighty iron safes at his bidding fly open alike in Paris, London, Pekin, and San Francisco.

The midnight-ranger, who, with murderous club, knife, pistol, or lariat, lurks for the unsuspecting pedestrian, came across the seas with the brand of the criminal and his hands red with the blood of his fellow-men. The slip-shod, sly sneak-thief, who, with bated breath, spectre-like, passes through apertures, doors, and windows as he nimbly plies his "jimmey," skeleton-keys, and chloroform on his march to the throat or pockets of his unconscious victim, has perhaps acquired the perfection of his art in Hamburg, Paris, London, or the penal colonies of Australia.

The shaven-headed, sandal-footed, shrunken-shanked, almond-eyed, addle-pated Chinaman, who, with stealth of fox and eye of lynx, "counts your chickens before they are hatched," and throttles your favorite rooster at the dead watch of the night, first, "like the hen gathereth her brood under her wing," bagged his chickens by the waters of the Hoang-ho or the Yang-tse-kiang. The well-dressed gambler who lies in wait for the "honest miner"—the quack doctor with specifics for all diseases—the diviner of things past, present, and to come, "speaking all languages" and interpreting the phases of the moon, the ebb and flow of tides, who looks equally wise in the shuffling of cards, rolling of globes, manipulating of crowns, or the tickling of palms, as he throws the mystic symbols of his art before his victim—may all have left their country for their country's good, and sought a new field for their operations in the land of gold. The lewd courtesan; the "nice young man travelling for his health;" the genteel "bummer," who picks his teeth at the doors of fashionable hotels, escorts stylish ladies to the opera, boasts of female conquests, and "subsists upon the enemy;" the vender of bad whiskey and other poisonous drugs; the unwashed and seedy street-corner loafer and bar-room bummer, whose unsavory breath pollutes the air, and whose unappeased maw and guzzling throat welcomes the stray crumbs, shrimps, and slops of the "saloon;" the "standing witness," who testifies according to his pay; the traducer and calumniator, who, for hire, drags the secrets of the family-circle and the grave before the public; the scribbler, who, through a subsidized and venal press, blasts the fair fame of man, and bends the pregnant hinges of the knee where thrift may follow fawning—these, with a large number of vicious, idle, frivolous, none-producing vagabond men and women, create in a great degree the burdens and evils against which the industrious, honest, producing people of California have to contend.

To hold in check the ever increasing tide of crime, and relieve the misery and want incident to idleness and profligacy, has sorely burdened the people of California, who find the establishment of new criminal courts, the building of capacious jails, hospitals, and asylums a matter of yearly increasing necessity.

### STATE PRISON.

At San Quentin, twelve miles north of San Francisco, in Marin county, is the *State Prison*, where representatives of every race can be seen, serving out the penalty of almost every conceivable crime and those too terrible for the ear. This institution was established in 1851, since which period to the 1st of January, 1870, there have been 4,528 convicts lodged within it.

Estimating the population of the State from 1851 to the end of 1870 at five hundred thousand, it will be seen that one out of every one hundred and ten of the population have been in the State prison: the number of persons convicted more than once must be deducted from this enumeration; but even this would leave the number of convictions large beyond comparison. It is estimated that more than twenty-five thousand persons have been indicted in the State for the commission of felonies; and that the total number of arrests in California, from the year 1849 to the beginning of 1871, for every species of crime and misdemeanor, amounts to four hundred thousand. As the population of the State from 1849 to the present period would average but little over this number, it will be seen that the number of arrests made during the twenty years of the existence of the State about equals the whole population; but it must not be understood that every person in California has been arrested at some period of his stay here: the fact that there has been a continuous stream of people passing through the State, and hoards of straggling vagabonds and adventurers from all parts of the world passing to and fro into the adjacent territories, and the fact that the same persons have been arrested many times, will, to a great extent, account for what might seem a record of unparalleled crime.

In the city of San Francisco, for the year ending June 30, 1870, there were 15,232 arrests made by the police; twelve thousand of which can be traced to the direct influence of intoxicating drink. During this period, the loss of stolen property to the amount of $130,517 was reported to the city police; of which $110,262 was recovered.

The completion of the overland railroad brought to San Francisco a great influx of professional thieves, burglars, and counterfeiters from Atlantic cities; but so bold were the operations of these professionals, and so efficient the detective police, that in nearly every instance the guilty parties were arrested, and many of them are now in the State prison.

At the beginning of the year 1870, there were 732 prisoners confined in the State prison. Of this number 374 were native-born Americans, 73 of whom were born in California. Every State in the Union was represented in this institution. There were also 358 persons of foreign birth confined here. Almost every known language was spoken, and almost every profession and trade represented except clergymen and lawyers. Of the total number of convicts, 515 could read, and 217 could neither read nor write. Of the Americans, 288 could read, and of the foreigners 227. The total of all classes that could read and write was 444. Many of the prisoners were serving a third, fourth, and fifth term, and one his sixth term, in a State prison.

During the year 1869, a school was established in the prison, and many of the convicts availed themselves of the opportunity and devoted all their leisure time to study.

The annual expense of conducting this establishment is $114,600. Beside this, there was, at the beginning of 1870, a debt of $87,000 incurred in enlarging the buildings; and the sum of $30,000 paid in this year, to settle an adverse title to the prison grounds.

### INSANE ASYLUM.

Insanity prevails to an alarming extent throughout the whole Pacific coast, superinduced to some extent by climatic effects, combined with intemperance, the exciting scenes of speculation, and sudden revulsions in fortune, or protracted impecuniosity. No particular class indicates excess over its fellows in these maladies and afflictions. The stalwart Polander and the meek Mongolian, the millionaire and the beggar, alike swell the ranks of the insane and the suicide.

As in the case of the State prisoners, every State in the Union and almost every nation on the globe is represented in this institution. There were 920 patients in the State insane asylum at Stockton at the beginning of the year 1870, and increasing numbers still pressed forward from every section of the State, seeking admission into an institution already crowded beyond its utmost capacity. Of this number, (920,) 676 were males and 244 were females. Insanity is much greater among the foreign than among the American native born. Of 482 persons admitted in 1869—of whom 102 were females—but 179 were Americans; while 283 were foreigners and 20 unknown. These unfortunates came "from Greenland's icy mountains to India's coral strand"—one from Iceland and one from India. Ireland was represented by the largest number of any foreign nation—99; next came Germany with 37; England, 29; France, 18; and China, 17.

During the nineteen years of the existence of the asylum—from 1851 to 1870—the total number admitted into it was 4,596; of whom 1,001 died and 2,243 were restored to reason. The expense of maintaining this institution is about $152,000 per annum.

### EXECUTIVE, JUDICIARY, LAWS, &c.

In a preceding chapter will be found a list of all the Spanish and Mexican civil and military governors and American military governors of California from the first settlement of the country to and including the year 1849. Since that period to the present there have been ten governors in California, as follows: Peter H. Burnett, who was the first American governor after the military rule, was elected by the people on the 13th of November, 1849, his term of office commencing on the 15th of December following; he served until January 8, 1851, when he resigned, and was succeeded by John McDougall, who was elected lieutenant-governor with Burnett; McDougall served until the 1st of January, 1852; John Bigler, who was elected for two terms in succession, served from January 1, 1852, to January 1, 1856; J. Neely Johnson, from 1856 to 1858; John B. Weller, from 1858 to 1860; Milton S. Latham, who was elected for the term from 1860 to 1862, after filling the office for fourteen days, resigned on January 14, 1860, and was elected United States senator; John G. Downey, who was elected lieutenant-governor with Latham, served as governor until 1862; Leland Stanford, January, 1862, to December, 1863. After this the governor was elected for a term of four years. Frederick F. Low was inaugurated on the first Monday in December, 1863, and served until the first Monday in December, 1867; upon which day Henry H. Haight was inaugurated to serve until the first Monday in December, 1871; at which time Newton Booth was inaugurated governor for the following four years.

The governor, with a lieutenant-governor, is elected for a term of four years. The governor receives a salary of seven thousand dollars per annum in gold, (the largest salary of any governor in the Union.) He resides at Sacramento, the capital of the State. The lieutenant-governor receives an annual salary of $3,600; he is compelled by law to reside at the State prison as resident director of that institution.

The governor must be at least twenty-five years of age, a citizen of the United States, and a resident of the State two years previous to his election.

In the Legislative department there are two branches—the senate and assembly; the first consists of forty members, elected by the people for a term of four years. The lower branch, or assembly, consists of eighty members, elected by the people for a term of two years. California is represented at the national capital by two senators, elected by the Legislature for a term of six years; and by three congressmen, elected by the people for a term of two years. All male citizens twenty-one years of age are entitled to vote at all elections.

The laws of California, in protecting individuals in their personal property and private rights, are most liberal. A homestead, of the value of five thousand dollars, is exempt from all debts, and may be held by the head of a family, a husband, widow, widower, or any person, married or single, acting as the head of a family; and any unmarried person, not acting as the head of a family, may hold a homestead of the value of one thousand dollars.

The separate property of husband and wife, before marriage, remains the separate property of each after marriage; so the property of each, acquired by inheritance or gift after marriage, remains the separate property of the individual acquiring it.

California has, by statute, wisely protected her people from the machinations and spoliations of the heartless creditor by exempting the tools of the mechanic, the horse and cart of the laborer, the dray or wagon of the expressman, the horses, farming implements; feed, and seed of the farmer, the library of the professional man, and the household furniture, provisions, and clothing of every householder in the State, from execution. There is neither arrest nor imprisonment for debt, except in the cases of fraud or an absconding debtor.

All the children of the family inherit alike. The father or husband controls all the joint property, and can dispose of it without the consent of the wife, except the homestead, which he cannot encumber or sell without the wife's consent. The husband also has the management of the wife's separate property, but the wife, on application to a competent court, can have another person appointed her agent.

Lands cannot be tied up indefinitely, as by statute a will to real estate is limited to two lives in being; and a lease cannot be made of real estate for a longer period than ten years, except for a town lot, which may extend a period of twenty years.

Conveyance by deed grants the *fee simple;* most all the other titles known in other parts of the world are almost entirely unknown in the State.

Statute of Limitations.—Articles charged in a store-account are barred in one year; on an account not in writing, two years; on a contract in writing, promissory note, &c., in four years; on a judgment, five years.

Divorce.—A divorce may be granted for any of the following causes: natural impotency, existing at the time of marriage; want of consent of parents where the female is under fourteen years of age, unless a ratification of the marriage is made after the parties become of age; by an act of adultery of either party; excessive cruelty; habitual intemperance; wilful desertion by either party for a period of two years; failure on the part of the husband to provide the necessaries of life for the wife (he having the ability) for the term of three years; obtaining the consent of either party by fraud; the conviction of either party of a felony. A residence in the State of six months next preceding the action is necessary, in order to give a court jurisdiction.

## JUDICIARY.

The Supreme Court of California consists of five judges, elected by the people for a term of ten years each, at a salary each of six thousand dollars per annum. It is the court of last resort in the State. Terms of this court are held at Sacramento on the first Mondays in January, April, July, and October.

The State is divided into nineteen judicial districts, with a district court of original jurisdiction in each. In each of these districts a judge is elected by the people, for a term of six years, at a salary of five thousand dollars. There are four judicial districts in the city of San Francisco: in these latter the salary is six thousand dollars each per annum. Each of the fifty counties in the State has a court called the county court. There are also other inferior courts of limited jurisdiction.

California constitutes a separate *United States judicial district*, presided over by a United States district judge, at a salary of five thousand dollars per annum. Courts are held at San Francisco, beginning on the first Monday in April, second Monday in August, and first Monday in December.

The States of California, Oregon, and Nevada constitute the *Ninth United States circuit;* and a United States circuit court is held at San Francisco, commencing its terms on the first Monday in February, second Monday in June, and first Monday in October. The judge's salary is five thousand dollars per annum.

The legal profession is well represented on the Pacific coast, and judges and attorneys of unimpeachable integrity and eminent attainments may be found all over the States and Territories of the entire country. There are at least from seven to ten lawyers in California where there s' ould be one. In all the towns and villages, and especially in San Francisco, where there are over *five hundred* of them, there is a great overstock of lawyers, and many of them find it most difficult to earn a livelihood. Some few firms and individuals do a fair business and some few a large business; but when a comparison is made between the lawyers of the State and the merchants, farmers, or other classes and branches of industry, it may be safely said that the lawyers of California as a class are the poorest men in the State, and that great numbers of them eke out an impecunious and precarious existence, from which there is no hope of relief until they abandon the profession. Three or four hundred of the lawyers now in San Francisco could soon add much to their fortune, health, morals, and the benefit of the State, by tilling the soil, raising stock or chickens, making butter, running sawmills, or conducting some branch of regular industry. The same might in truth be said of doctors and other professional men, who, for the sake of staying in a city, undergo all the pangs of poverty, while the broad acres of a generous soil only await the touch of industry to yield its rich harvest and bounteous rewards.

Throughout the whole Pacific coast, every city, village, and town is overstocked with "professional men"—lawyers, doctors, dentists, "artists," &c.—and still thousands of young men in the East anxiously seek the West for a field of professional labor. The anvil and the plow still call for young and active men, promising them peace, health, and plenty, while the occupations suited to woman, and the streets, concert halls, gambling houses, and drinking saloons are crowded with stalwart "loafers" and decayed dandies, who, in our practical age, are but a burlesque upon the sex to which they belong.

## CHAPTER XXVII.

Chinese empire—Chinese in the United States—Seeking gold in America—In California—Employments, character, and customs of the Chinese—Chinese in San Francisco—Moral depravity—Chinese persecuted—Social and political condition of the Chinese—Buddha, Confucius, and Mencius—Religion of the Orient—Chinese classics—Opium and other stimulants—Small feet of the women—Christianity among the Chinese—Coolyism—Chinese slavery in America—Spanish barbarity.

THE great empire of China, with its four hundred million of people, peculiar in physical type, customs, and religion, has, until a recent period, remained comparatively excluded from the rest of the world.

Commercial intercourse with many of the seaports of the empire has long existed, but the great interior of the country, with its olive-faced, almond-eyed, shaven-headed, sandal-footed people, is still almost unknown.

Merchants, travellers, and missionaries may be found about the seaports, and gradually work their way into the skirts of the country; but European customs and the name of Christ and his mission are all unknown to the people of this vast empire, still dreaming over the philosophy of Buddha and Confucius, plodding along without the appliances of steam and the aid of modern invention. China is to-day as it was centuries ago, and centuries hence will find this vast nation almost as exclusive as it has been since the creation of the race.

Until a recent period no Chinaman was allowed to leave his country, and if by accident or design any found their way into foreign lands, and returned to their

MOUNT TAMALPAIS, FROM THE BAY OF SAN FRANCISCO. (Marin county, California.)

homes, transportation for life or decapitation awaited them.

Throughout the civilized world to this day the appearance of the strange people of this oldest empire, with flowing robes, sandals, and cue, is a source of wonder and curiosity, always suggesting the Darwinian theory of the creation of our species.

The date of the arrival of the first Chinaman in America is uncertain. A few Chinese and Japanese have, at remote periods, been driven from their native shores to the islands of the Pacific, and occasionally upon the western coast of America; but no effort had been made for thousands of years, either by these people or their governments, to see other lands or affiliate with other people.

In the twenty years from 1820 to 1840 but eleven Chinese had arrived in the United States, and from 1840 to 1850 but three hundred and thirty-five. Of this latter number three hundred had arrived at San Francisco in 1849, induced to seek their fortunes in the new El Dorado.

The discovery of gold in California forms a new era in the history of Chinese migration. The proximity of the Golden State to the Orient, with direct ocean communication, soon broke the hermetic seal of the "flowery kingdom," and brought floods of its strange people to the shores of America.

A few years before the discovery of gold in California, vessels trading between China, the Pacific islands, and San Francisco carried a few Chinese as cooks and servants. On the 2d day of February, 1848, the brig *Eagle*, from Canton, arrived at San Francisco with the first Chinese in the country—one woman and two men who came over in the employ of an American gentleman long resident in China. The men went to the mines, and through them and the masters of vessels anxious to employ their craft in profitable trade news reached China of the rich gold-fields of America. Yankee ingenuity was soon employed, and walls, trees, cliffs, and masts of ships at Hong-Kong and Canton proclaimed in blazing colors and Oriental hieroglyphics the startling news of *mountains of gold in California.*

Late in 1848 a few Chinese gold-hunters arrived at San Francisco, and in 1849 came an addition of three hundred; so that the earliest American pioneer to the gold-fields found himself face to face with these people. At first the Chinese were regarded with great curiosity and treated with kindness; but the vast numbers in which they soon came to the country, their exclusive habits and indifference to every thing American, changed kindness to fierce hostility, which loses none of its bitterness with lapse of time.

The number of Chinese who arrived at San Francisco in 1850 was four hundred and fifty; in 1851, twenty seven hundred; and in 1852, eighteen thousand—more than eleven thousand having arrived in the month of June of this year.

The total number of Chinese who arrived in the American republic to and including 1870 is estimated at one hundred and fifty thousand; of whom, according to the census returns, 63,154 still remain in the country, 74,646 have returned home, and twelve thousand have died. (The bodies of the dead are all sent to China.) Of the 63,154 Chinese in the United States, 60,765 are on the Pacific coast, as follows: California, 49,277; Nevada, 3,152; Oregon, 3,330; Arizona, 20; Idaho, 4,274; Utah, 445; and Washington Territory, 234; leaving but 3,389 Chinese in the whole republic outside of the Pacific coast; of this number, 1,949 are in that portion of Montana in and about the region properly embraced with the area of the Pacific slope. These are divided among the following States and Territories, as follows: Arkansas, 98; Connecticut, 2; Georgia, 1; Illinois, 1; Iowa, 3; Kentucky, 1; Louisiana, 71; Maine, 1; Maryland, 2; Massachusetts, 87; Michigan, 1; Mississippi, 16; Missouri, 3; New Jersey, 5; New York, 29; Ohio, 1; Pennsylvania, 13; South Carolina, 1; Texas, 25; Virginia, 4; Colorado, 7; District of Columbia, 3; Montana, 1,949; Wyoming, 143.

It will be observed that by the census of 1870 many of the States had not a single Chinese in them. The census of this year shows but 55 Japanese in the whole republic, as follows: California, 33; Massachusetts, 10; Michigan, 1; New Jersey, 10; and Pennsylvania, 1. Since this period many Japanese have arrived in the country, the great majority being of the higher classes, and have entered our colleges and scientific schools, where they make rapid progress in the languages, and seem to feel a deep interest in adopting the costume, language, and customs of the new world. Many Americans have, within the past two years, at the invitation of the Japanese government, gone to that country, and, under large salaries, entered into the service of the Mikado; others have been engaged as teachers and instructors in modern civilization. Japan is represented at Washington by a minister; and with *fifty-five* Japanese in America for the past three years, they have imbibed and diffused more of our American ideas than *one hundred and fifty thousand* Chinese who have landed in our country have done in the past twenty years.

As may be seen by reference to the location of the Chinese, it will be noticed that they have spread over the entire Pacific coast: indeed there is not a camp, station, city, or village throughout the remotest part of California, Nevada, Oregon, Utah, Montana, Idaho, Washington Territory, and British Columbia, but these people are to be seen, engaged in mining, wood-chopping, making roads, farming, fishing, gardening, washing, in factories, and in houses as cooks, chamber-maids, (men,) nurses, and general servants. But, in whatever capacity employed, one thing is apparent everywhere: that they have no attachment to the soil, customs, or people of America—they don't take root in the country

Not being so rugged as the Saxon or Celt, the Chinaman adapts himself to the lighter out-door work and to the duties generally performed by women in all parts of the world outside of the Pacific coast of America; and when, with his shaven-head, smooth face, wooden shoes, white stockings, and white jeans, costume flowing loose and airy, he is engaged in household affairs, while puzzling man to know his species or sex, he is the picture of ease, order, cleanliness, and sobriety. But see the Chinaman as he is to be seen in his own quarters—see twelve thousand of them huddled together within a few blocks in San Francisco, stewing in their filth, fumes of opium and odors known only to a Chinaman—see them cooped by hundreds in a single room, packed away like mummies on shelves, in dark, damp holes, subsisting upon scant morsels of boiled rice and dried fish—see him waddling knee-deep in filth through narrow, dark alleys, lined with rickety shanties, whose each window-pane reflects the spectral form of his painted, courtesan countrywomen, plying their vile arts by such signs, gestures, and grimaces as put even the sturdy "honest miner" to flight—see all this! have your olfactories draw mild comparisons between a Chinese "stink-pot" of ancient times and these imported and nameless odors, and feel compassion for the hog put in comparison with these heathen, in their styes, and you may have some idea of social life and habits among the celestials in Sacramento and Jackson streets, and other localities in San Francisco.

Three virtues are always found prominent with Chinamen: patience, frugality, and sobriety. Nothing so much draws out our sympathy and interest to these people as their childlike, innocent-looking faces, and the uncomplaining, mild disposition with which they pursue their allotted employment.

Chinamen in the mining districts of the Pacific coast are generally employed in surface-mining, and working mines abandoned by Americans. In many instances they make rich discoveries and good pay; but thousands work where fifty or seventy-five cents per day only can be made. They never engage in quartz or deep diggings, preferring to sit and shake a rocker through the long day in the broiling sun, if fifty cents per day can be made, to risking themselves underground for any inducement. As a rule, Chinamen will not go below the level of their heads in mining on any terms.

In mining, farming, in factories, and in the labor generally of California, the employment of Chinese has been found most desirable; and much of the labor done by these people, if performed by white men at higher wages, could not be continued nor made profitable.

Thousands of Chinamen were employed in building the Central Pacific railroad from San Francisco to Ogden, in Utah; and thousands are constantly engaged in similar work in all parts of the Pacific coast, always giving satisfaction. Indeed it is conceded by those employing them that, while in physical powers they are inferior to the white man, they are superior in diligence and sobriety. Drunkenness, fasts, feasts, saints-days, celebrations, election-days, clubs, companies, orders, societies, parades, and every thing else that attracts other men, are entirely unknown to a Chinaman. One week in each year he must have for his new year; and although he would once in a while like to present his *Joss* with a roast pig or offering of a spring chicken, he will forego this, and leave his soul to fate, rather than lose a day and his seventy-five cents.

With a resignation that might well become men toiling only for eternity these quiet people plod through the long years, heedless of all passing events save the revolutions of the globe, at whose turn they count off their daily stipend. Internal nor external affairs of State or nation disturb not the Chinaman. His home is far away. In the distant future he sees accumulated coin, a great ship with white sails, and a broad sea, and beyond this he sees his almond-eyed bride, pig-tailed offspring, floating gardens, fat ducks, and a happy refuge in the blessed land of his ancestors.

In San Francisco whole blocks and streets are occupied exclusively by Chinese, where they conduct every branch of commerce and traffic in Oriental style—*Joss-houses*, theatres, markets, workshops, gambling houses, all in operation. There are many large importing houses and wealthy firms, high in the estimation of the mercantile community: some of these have accumulated considerable wealth. Thousands of Chinese are employed in the city in factories, making slippers and cigars; and large numbers are engaged in washing. Chinese wash-houses strike the eye at every corner throughout the whole city, and in every city on the Pacific coast.

The census of 1870 shows 11,810 Chinese in San Francisco; of whom 9,777 were males, and 2,040 were females. Of the males, 877 were under fifteen years of age; and of the females, 271 were under fifteen years. There were 189 males and 131 females born in California—320 American citizens born of Chinese parents.

No further commentary upon the morals of these people will be necessary than to state that, out of the 1,769 Chinese females over fifteen years of age in San Francisco, 1,452 are public courtesans; leaving but 317 Chinese women in the city assuming virtue.

The Chinese in San Francisco have accumulated considerable property, notwithstanding nearly all their earnings go to China. The aggregate wealth of this class is two million dollars, all of which is personal property, except seventy-five thousand dollars in real estate owned by a "Chinese doctor" having a large practice among Americans. This is the only real estate owned in the city by Chinamen.

For many years the bitterest prejudice has prevailed among all classes on the Pacific coast against the Chinese. The great competition in labor and the lowering of the standard of wages induced by these people strike directly at the laboring classes, who raise their voices loud against the presence of those who degrade their occupation by reducing its pay below the standard of remunerative prices; and who, not adapting themselves to the institutions of the country nor affiliating with the people, continue to remain aliens and strangers.

Political parties, ever catching at popular prejudice to gain temporary strength, have grasped the passions of caste and race, thrust them into their doctrines, and incorporated them into their laws, raising oppressive barriers and cruel distinctions between men; so that, by special laws, the Chinaman throughout the Pacific coast has been made the centre of personal hatred and legal discrimination that alike degrade manhood and disfigure the temple of justice.

Popular opinion, marking with its caustic touch passing men and events, has placed a deep brand on the face of the Chinaman on the western shores of America, until society utterly refuses to receive as "man and brother" any member of that vast race forming more than one-third of all the people on the globe, and boasting of a literature and religion centuries older than civilization in the western world.

In California no social intercourse whatever, except in commercial affairs, is held between Americans and Chinese; indeed, no thought of the possibility of domestic relations between the Chinaman and the Caucasian enters the minds of either people.

Marriage with any other of the colored or mixed races of men, Indian or negro, is possible; but no white man on the Pacific coast has yet made any such alliance with a Chinese. In the strangely blended types of man, as found in California, mixed and crossed breeds, between almost every race and shade, present Caucasian blood; but no instance is to be found pledging the mutuality of the Saxon or Celt with the people of the Orient in the propagation of half-breed Chinese.

In New York, Louisiana, and perhaps other sections of the East, instances exist of marriages of Irish women to Chinese husbands; but on the Pacific coast no white woman has, so far, yielded to a disgrace that would at once place her outside the pale of the lowest society of her people, and endanger her life itself; for so deeply rooted and general is the prejudice against amalgamation with Chinese that every species of crime may be committed under some pretext or other, but the last crowning sin—to marry a Chinese—will be avoided. The human nondescript that might be produced by the amalgamation of the Caucasian and Chinese must long remain unknown, at least in California.

Whatever may be said of the Chinese religion by those who know but little about it, it must be confessed that their three great teachers, Buddha, Confucius, and Mencius, in morality, sobriety, and the plain, practical precepts of life, stand unsurpassed in the history of the human race. In all the writings of the advocates of other religions no passages more deeply weave themselves into the fabric of our better human nature than the sweet, tender, loving tones of Confucius when pleading obedience to the laws of nature and advocating filial love and obedience.

The doctrines of the Chinese philosophers, while aiming remotely at a future state of existence, and acknowledging the fatherhood of the Deity and practical progress in sanctity, is unencumbered with the terrors of fire, and the mystic vail through which the disciples of *miracles*, *mysteries*, and *metamorphoses* struggle to gain glimpses of eternity.

To-day Christianity is the great predominant religion of the West, while Buddhism continues to be the religion of the East, indorsed and adopted by half the people of the globe. Christ came to teach in the humble capacity of a carpenter's son; Buddha, as the born son of a Hindoo king, stepped from a throne to the low estate of a beggar to teach humility. The life of Buddha, the founder of the religion of the East, began in Hindostan five hundred and fifty-seven years before Christ: he died at eighty years of age. The family name was Gautama, or Sakya-Muni; and in later life the prophet was called Siddartha, "he by whom the end is accomplished," and finally *Buddha*, "the enlightened," as Jesus is called the Christ, the giver of truth. At the age of sixteen, by pouring water on the head, he was consecrated as prince royal. From earliest youth he was most studious, and in the sciences of his times was regarded as most remarkable. Great care was taken to keep from him all painful sights, that his mind might not be afflicted with sorrow; but the sight of an aged man, a loathsome disease, and a corpse, for the first time, had so pained him with the thought that to such all might come as to cause a sudden change in his whole life. Turning his back upon palace, father, wife, child, and friends, in the garb of recluse, and in the face of a narrow, intolerant religion of the Brahminical church and cruel, caste proscriptions, he entered upon the establishing of broader ideas and a literature in harmony with the new progress. To-day the doctrines of Buddha are the foundations of the prevailing religion of Hindostan, Ceylon, Burmah, Siam, Corea, Thibet, Cochin China, China, and Japan. If numbers be evidence of the virtue or strength of a religion, let us remember that, in 1872, the estimated population of the globe was 1,380,000,000, of whom 380,000,000 were Caucasian, 200,000,000 Ethiopian, 220,000,000 Malay, 1,000,000 Indo-American, and 580,000,000 Mongolian.

Buddhism, now known in China as the religion of *Fo*, was introduced into that country from Hindostan about the year sixty of the Christian era, and now, amalgamated with the doctrines of China's greatest sage and teacher, Confucius, forms the staple of Oriental faith; but its origin in Hindostan dates back five hundred years before Christ.

Confucius, whose father was prime-minister of the state wherein he lived, was born five hundred and forty-nine years before Christ, in the ancient kingdom of Loo, in the northeastern portion of China, now the province of Shan-tung. He was at an early age left an orphan and educated in retirement by his mother, Ching—a woman of remarkable virtues and intelligence. The family name was Kung Chung-ni, but is popularly styled Kung Fu-tse. The study of diplomacy and political economy early engaged his attention. He married at nineteen, and, like Buddha, on the birth of his first child left his wife, the more closely to apply himself to his studies and professions. Wandering from province to province he promulgated the philosophy which has made him immortal in the eyes of Oriental nations, and to-day dedicates the valley where repose his remains as a sacred spot, pointed to by the learned and devout of his race as holy ground to pilgrim and priest.

In the *Wu-king* and *S-shu*, "The Five Classics and Four Books," the writings of Confucius, are found the fundamental basis of the social, political, and religious practices of the Chinese nation. Here we first find recorded that earliest manifestation of nature's sweetest voice, *The Golden Rule:* "What you do not want done to yourself do not do to others;" which, in modified and altered forms, has been woven into sacred history and laid down by Christian teachers as the light of the law of eternity. Here, too, we find the first proclamation of the fatherhood of God, "All between the four seas are brethren," says Confucius.

The perfection of God and his creation is beautifully set forth in that simple, natural belief, to which enlightened man in all lands seems to be approaching, that "All men are born perfect, and if not educated, the natural character is changed, and man becomes depraved." Few persons, not blinded by the green vail of superstition, watching the sweet, simple innocence of childhood, the purity of youth, and the depravity of manhood, can adopt the theory of *pains, penalties, and fire* for the departed spirits of babes, and that mature age, penance, and fiery purgations are the only paths to the presence of God. "Jesus may do for foreigners, but Confucius is the holy man of China," says the son of the Orient as he listens to the tale of the fierce torments necessary in the purgation of the "original sin" of the Caucasian.

In the material world, centuries upon centuries have rolled away—kings, governments, and dynasties grown and disappeared—Persia, Assyria, Egypt, Greece, and Rome flourished and faded away—the eternal hills themselves have lifted and lowered their heads in the lapse of time; but the Chinese nation and the Chinese people remain unchanged. No admixture of other races leaves a single line upon the physical mould; nor do the busy changes in science, government, society, or religion leave a single imprint upon the stereotyped conditions of these people, whose primeval customs, literature, and religion are as active and fresh as they were centuries before the deluge, the dispersion at Babel, and the rule of Kublai Khan. The China of to-day is but the Cathay of centuries ago.

On the Pacific coast of America, more than in any other part of the globe outside of China, can be seen, in Oriental purity, the Chinese people. In San Francisco, where twelve thousand of them live, all their social habits, peculiarities, and religious dogmas are practised as in their own country. In every town of importance in California, Oregon, Nevada, Utah, Montana, and Idaho, distinct communities of Chinese, with their merchants, doctors, prophets, mechanics, actors, priests, and laborers, are found, with their temples, theatres, and gambling-houses. San Francisco alone has five public *Joss-houses*, with innumerable images of prophets, kings, gods, animals, birds, beasts, fishes, insects, and fearful-looking nondescript creatures having their origin only in the brain of some enthusiastic disciple of Buddha.

In the *Joss-houses* there are no regular hours for worship. In each, one or more officiating priests live in some wing of the building, and are generally attending to lighting *Joss-sticks*, feeding lamps, arranging vases, shifting scenes, mats, carpets, and flowers, sounding gongs, and burning fire-crackers. A fortune-teller, at a side table, in the presence of the gods, directs the earthly affairs of his confiding audience, who dole out their scanty coin for his mystic art.

People pass in and out of the temples at all hours of the day, some lounging idly, walking about, and jesting pleasantly upon the appearance of the figures before them; others more devout bear fresh oil for the lamps, flowers, fruit, boiled rice, sweetmeats, roast fowl, and roast pig, and distribute them, in tempting display, before the painted images. After a few prostrations, cracking of *Joss-sticks*, burning of paper, sounding of gongs, beating of drums, and the deafening roar of innumerable fire-crackers, the worshippers gather their offerings of flowers, chicken, and pig, and, through the smoke and odors of the *Joss-house*, pass quietly to their homes, to pick the sacred chicken-bones and eat the rice upon which Joss is supposed to have made his imaginary feast.

Chinese never bury their dead in foreign soil, and the bodies of all dead Chinamen throughout the remotest interior of California are gathered up by friends and agents, shipped to San Francisco, and from there to China. The spirit of a dead Chinaman, according to Chinese belief, can never reach the happy sphere of his departed ancestors while the body lies in the soil of the foreign barbarian.

Mourning for the dead is proclaimed by the wearing of *white*. The friends of deceased persons follow the dead to the grave, scattering *Joss-paper* to notify the spirits of their new companion. Flowers, fruits, boiled and roast chicken, ducks, and pig are laid upon the grave, to appease the hungry gods, and mollify the spirits of deceased ancestors.

Love-making among the Chinese is never indulged in by the writing of letters or personal interviews of the parties interested; such would be considered very shocking. Match-making is conducted by a class of women who go about from one family to another, and report to the parents of youth desirable matches of either sex. Sometimes engagements are made between mere children, and by parties at remote distances. The lovers never see each other, and, as the bride is closely vailed, the "happy man" never sees the face of his wife until after the marriage ceremony, and when in the bridal chamber. But little affection exists between man and wife. They are never seen in company together, and if company visit the home the wife is not permitted to sit at table. In the street husband and wife do not walk side by side, nor arm-in-arm, but the wife, at a reserved distance, trots along behind. The universal education of Chinamen in their country does not extend to females, but stringent laws, with penalties, are enacted, prohibiting the education of women.

Under the existing laws of the Chinese empire, polygamy is not prohibited, and the husband can sell his wife and child at pleasure. Infanticide prevails to an alarming extent; but male children are never destroyed by their parents. Writers, sages, and teachers in the empire all denounce child-murder, but no law of the land makes it a crime.

No holiday, day of repose, or Sabbath is observed by the Chinese, except the new year. At this time a great demonstration is made, generally lasting a week. New year is the time when all appear in their choicest flowing robes. New silk must be added to the cue; the head must be clean-shaved, and gorgeous feathers, silks, satins, and flowers ornament both sexes. All outstanding debts are adjusted, and receipts passed in full, paid or not paid.

The beginning of the year is not at regular periods of time: it occurs in each year at the time that the first new moon appears after the sun enters *Aquarius*, which is at irregular periods between the 21st of January and the 19th of February.

In their mode of eating, and what they eat, the Chinese appear as strange as they do in their religion and costume. Tea, the great staple of their country, is drank by all, but without milk or sugar; a small quantity of dry tea is put in a small cup holding a mouthful, boiling water is poured on this and drank at once. Rice, fowls, vegetables, fruits, sweetmeats, and pork form the staple diet of all Chinese: but little bread is used, and beef, mutton, butter, cream, and milk are totally unknown as articles of food. The use of the knife and fork is unknown, all food being carried to the mouth with the chop-sticks: these are about the length and size of a pen-holder, and are held between the fingers, the two outer ends coming close together, and the velocity with which a Chinaman will carry to his mouth his food or a stream of soup is only within the comprehension of the skilled in hydraulics.

The Chinese indulge but little in intoxicating drinks: brandy, wine, and other beverages are used by some, but never to excess; whiskey, gin, and other compounds so freely used by Caucasians, are never tasted, and drunkenness is almost unknown. In seventeen years intercourse with a hundred thousand Chinese, the writer has never seen a drunken Chinaman. If the philosophy of Confucius has taught these people what the *Koran* has taught the Mohammedan and what all the rest of our race have failed to learn, something has been accomplished.

Tobacco in pipes and cigars are freely used by nearly all Chinese; but so far the chewing of this narcotic is left to their wiser brethren of Europe and America.

Opium, the great enemy of the Orient, was for many years excluded from the Chinese dominions by rigid laws; but the avarice of British merchants, in the name of the "*Honorable* East India Company," and backed up by the English government, at the point of the bayonet, in 1839, imposed its sale, and opened Canton to its free importation. Chinese on the Pacific coast of America indulge freely in the pernicious drug so fatal to their countrymen; and, beside the regular imports, unheard-of devices are resorted to in smuggling it into the country.

The importation into the United States amounts to over two hundred and ten thousand pounds annually, valued at two million dollars, upon which an import duty of one million dollars is paid. In Tennessee and other Southern States opium is grown to some extent, and the white poppy grows well in California; but the tedious process of scoring the poppy bulbs and high rate of wages must permanently prohibit opium production in America. The great supply centres of opium are Persia, Turkey, Arabia, China, and India. This drug is obtained from the capsules of the white poppy; it is heavy, of a dense texture, and brownish-yellow color; not perfectly dry, will receive an impression from the finger; tastes bitter and acrid, and has a faint smell. It is used by smoking, and, while its fumes are soothing and fascinating, its effects are most destructive and prostrating, ending often in physical and mental exhaustion and insanity. Persons addicted to its use often become so infatuated with its influence that they abandon all business and society, betake themselves to some secluded dark hole, and, drawing with their last breath the fatal opium pipe, surrender life to this subtile tyrant.

In dress, the costume of male and female Chinese differs but little: loose flowing garments of some light stuff, wooden shoes, and white, drab, or sky-blue stockings, are alike worn by both sexes. The heads of the women are not shaven, and instead of the braided cue of the men they wear the hair fantastically glued up in broad fan-like wings, and gayly bedecked with flowers.

Widows in China are not permitted to marry within three years of the death of the husband, and marriage with a widow is at all times reproachful. On her second marriage, a woman is not permitted to indulge in any display: she must dress plainly, and, instead of the gorgeous sedan of the nuptial festivals of virgins, she must be carried in a plain black chair by two men only.

The custom of compressing the feet of Chinese women is of ancient but obscure origin: it is done solely as a mark of beauty, as their Caucasian sisters compress the *waist*. When the child is from three to five years of age, the feet are firmly bound with strong strips of cloth, the toes bent under, and the foot placed in an iron shoe: in this condition it remains for several years, the child meantime undergoing intense agony. When the person is full-grown, the foot is but the size of a child's. The process completely cripples the person, but the more helpless and tottering the greater the success and the greater the beauty. So far, no small-footed Chinese women have arrived in America, because all the immigrants have been from the towns of Hong-Kong and Canton and of the poorer classes, who cannot afford the luxury of small feet, and who by long intercourse with foreigners have abandoned the custom. The idea that but one foot is compressed is incorrect: both feet alike undergo this torture.

In walking, Chinese always go in single file: they never walk arm-in-arm nor abreast, but string out like a flock of wild geese, one after another.

A Chinaman never drinks cold water: if he drinks water at all, it must be hot, or at least warm.

Throughout the whole of China, and indeed wherever Chinese are found, all the labor is done by the people. Horses are unknown in labor, and, unless kept by a few high officials and military men, are never seen in the empire. All the heavy burdens, stone, timber, and merchandise are carried on poles, to which hundreds of Chinamen are sometimes attached. Wagons and carriages of every description are unknown; the *sedan* and chairs attached to poles conveying all travellers and pleasure-seekers.

In the few instances in which a Chinaman uses animal force, in plowing or other work, he makes but little choice in selection of species; so that to see a horse, cow, mule, ass, sheep, dog, and a goat all hitched up together would be quite in harmony with his propriety and adaptation of animal utility.

Chinamen in America make but little progress in Christianity. In San Francisco considerable effort has been made by efficient and earnest Christian ministers to evangelize these people. A Chinese missionary school and chapel have been maintained for many years; and, while many Chinamen partake of the benefits of such institutions to acquire the English language, not a dozen conversions have been made in twenty years; and a *real* *devout* Christian Chinaman is something yet to be seen in the new world.

No Chinaman in America has yet undertaken to study our laws or familiarize himself with our system of government. During the rebellion of 1861–5, the seventy thousand of these people in the country remained totally oblivious to all passing events: no one of them ever shared a single thought or sympathy with either combatants, neither frowned at defeats nor rejoiced at victories. There is neither a Democrat nor a Republican Chinaman in the whole republic of America.

Coolyism, or the enslaving of Chinese, is carried on to considerable extent throughout the islands of the Pacific ocean, the republics of South America, Brazil, and the West India islands. Most of the Chinese finding their way into these countries are shipped from the port of Macao, lying on the south coast of China near the mouth of the river Hong-Kiang. Spanish and Portuguese speculators and captains seem to have almost an exclusive control of this traffic, in which African slavery in its worst forms exhibits but mild types of horrors.

Since the abolition of negro slavery in the republic of America, strenuous efforts have been made to introduce Chinese labor into the cotton and rice-fields of the South, with but little effect.

It is estimated that in South America, the Pacific islands, and the West Indies, there are at least eighty thousand of these unfortunate Asiatics, deluded from their country by the allurements of heartless speculators, now undergoing the horrors of slavery in lands where white and black alike hold them in contempt, and lay the heavy burdens of servitude and bondage with relentless severity.

At the port of Macao and its vicinity are agents of the Portuguese government authorized to conduct the deportation of the coolies. Other agents and runners of the Spanish and Portuguese governments drum up in the country all Chinese who can be induced to ship on a contract of eight years service at four dollars per month, with food, clothing, lodgings, and medicine. At the port of debarkation, a form implying the willingness of the Chinaman to indenture himself and embark is gone through; and, after the vessel with her human cargo on board is ready to sail, a final inspection of willingness on the part of the "cooly" is had, but generally in such a hurried and imperfect manner that the poor slave learns his fate only when between decks of the ship he finds himself battened down and with his astonished countrymen packed like sardines, or when, on his arrival in America, he finds himself the bound slave of a cruel master, or on the auction block. To the credit of humanity be it said that Chinese declaring their unwillingness to leave their country are, under the authority of the officers at Macao, released and put on shore; but under the specious arguments of "runners" they soon find themselves at sea.

Great numbers of coolies find their way to Cuba, where they are employed on the sugar plantations as cooks, house-servants, washers, cigar-makers, sugar-makers, and in all manner of drudgery. At the present time there are upwards of thirty-five thousand of these people in Cuba, and a recent decree of the captain-general of the island compels all not bound, within a given period, to select masters at four dollars each per month;

in failure of which they will be arrested and under the government placed at labor for life, or until they select masters under prescribed rules of the captain-general and a board of directors.

Numbers of French and Spanish vessels are engaged in carrying coolies from Macao and other Chinese ports to the port of Mariel, a few miles west of Havana, and after quarantine they are sent to their masters and landed at the city of Havana, their destination. All not contracted for are sent to a guard-house until disposed of, and those held under indenture are taken charge of or sold, their term of servitude being eight years, and transferred to the new master by a Spanish official. All those arriving in ill health or disabled are auctioned off to the highest bidders, who place them in hospital until restored to health, when they are set at work or sold again at great profit to the first buyer.

In their new homes the poor Chinese slaves soon find their circumstances most wretched: they learn a little Spanish, but only to know their degradation—slaves to the whites, and hated by the blacks. Thrilling scenes of revenge by the coolies, by fire, poison, or otherwise, often follow acts of cruelty by the whites.

It is fair to conclude that nothing short of the interposition of the United States government and the substitution of republican freedom over the land will ameliorate the condition of the wretched cooly in Spanish America and the West Indies.

SUMMIT OF THE SIERRAS.
(17,000 feet above the sea—clad in perpetual snow.)

## CHAPTER XXVIII.

**Counties—Coast counties—Area—Productions—Population—San Diego—Los Angeles—Santa Barbara—San Luis Obispo—Monterey—Santa Cruz—San Mateo—San Francisco: composition of the city, its population, education, buildings, trades, professions, newspapers, nationalities, society—Marin—Sonoma—Mendocino—Humboldt—Klamath—Del Norte.**

In the general description of California in preceding chapters, the principal features of each section of the State—climate, seasons, mountains, rivers, lakes, bays, harbors, forests, mines, and agricultural productions—are given. To more fully convey to the reader the great development, resources, climate, and condition of the different sections of the State, each county in California, with its climate, seasons, natural productions, and material prosperity, with the area, population, and principal cities of each, are here set forth. The productions and material wealth of each are given as they were in 1870, this being the period of the enumeration of population.

In order that the various sections of the State may be followed in their physical connections, the counties are divided into three classes: the *coast counties*, facing upon the Pacific ocean, the *valley and interior counties*, embracing the chief agricultural portions of the State, and the *mountain counties* in and about the Sierra Nevada range, representing the great mineral wealth of California.

The most southern county, adjoining the Mexican Territory of Lower California, is San Diego, which forms the first county (beginning south) of the

## COAST COUNTIES.

San Diego.—The first settlement made in California was made in this county in 1769. Here is situated the beautiful harbor of San Diego, the early haunt of the Jesuit fathers. The county is among the largest in the State; its area is 15,156 square miles, making it almost as large as the republic of Switzerland, with its 15,261 square miles of territory. Several of the New England States might be contained in this county. The combined area of Delaware, Rhode Island, Connecticut, and Massachusetts is but 16,030 square miles.

The county of San Diego is bounded on the west by the Pacific ocean, north by Los Angeles and San Bernardino counties, east by the Colorado river, which separates it from the Territory of Arizona, and south by the Mexican Territory of Lower California. The climate of this county is mild, and very equal, not being surpassed in any part of the world. Frost and snow are never seen, and the years succeed each other through successive periods of bright, balmy, dry, sunny summers, and gentle rainy seasons of brief duration, in which hill and valley are clad in verdure and fragrant flowers. In this county the rainfall is only one-quarter as much as it is at San Francisco. All the tropical fruits grow in San Diego—the orange, lime, lemon, and fig—and experiments recently made with the pine-apple and banana show that the climate and soil are well suited to them.

The population of San Diego county is 4,951; of whom 3,743 are native born and 1,208 are foreigners. There are 2,300 residing in the city of San Diego, the county-seat. The county is eminently an agricultural one, the soil being rich and the climate genial. Stock-raising is also carried on extensively. No mineral of importance had been discovered in this county until 1870, when rich veins of quartz, containing free gold, were found in the southern portion. Since this time, three quartz mills have been built, and mining is carried on to some extent.

The surface of the country is a succession of rolling, bald hills, covered with wild oats, grass, and flowers, and rich, fertile valleys. Forest trees are rarely met with.

There are in the county twenty thousand acres of land under cultivation, one hundred thousand grapevines, thirty thousand cattle, ten thousand horses, and forty thousand sheep; and there are sixty thousand bushels of wheat grown annually.

LOS ANGELES.—Lying directly north of San Diego, on the line of the coast, is Los Angeles county, with an area of six thousand square miles, 1,100 of which are in islands off the coast; and a population of 15,309, of whom 10,984 are native and 4,325 of foreign birth: 5,600 reside in the city of Los Angeles, the county-seat. The county is bounded south by San Diego, west by the Pacific ocean, north by Santa Barbara, and east by the county of San Bernardino.

The climate here, as in San Diego, is perpetual summer: frost and snow are unknown. Gentle rains in winter cover the whole surface with green and wild oats; native grasses and flowers spread over the vast rolling hills and rich valleys, which are entirely free from trees and present a charming scene. All the semi-tropical and many of the tropical fruits grow well and the county is celebrated for its vast vineyards and orange groves. The orange in this county is ripe in the months of December and January, and in quality is superior to those grown in Central America and the Sandwich islands.

The rainfall in Los Angeles is only about half as great as at San Francisco. Like all the southern sections of the State, there are eight months without rain during which the sun hangs like a ball of fire in a cloudless sky; but the prevailing westerly winds from the Pacific ocean cool the atmosphere, so that heat is never oppressive. This county was settled at an early day by the Jesuits, who discovered gold and made some progress in placer-mining in this county three-quarters of a century before the discovery at Sutter's mill, in 1848.

Some idea of the prosperity and resources of this *angel land* may be had when we know that there are in the county fourteen thousand horses, twenty-five thousand cattle, five million grape-vines, producing annually one million five hundred thousand gallons of wine and one hundred thousand gallons of brandy; four hundred and fifty thousand sheep, producing annually one million three hundred thousand pounds of wool; two thousand four hundred fig trees, three thousand seven hundred lemon trees, five thousand three hundred walnut trees, two hundred and fifty thousand mulberry trees, two thousand olive trees, and thirty-five thousand orange trees. The county produces seventy thousand bushels of wheat, one hundred and forty thousand pounds of honey, and three hundred thousand bushels of barley; and produces one-third of the whole corn-crop of the

State, one-third of the tobacco, and one-fourth of the silk cocoons grown in California.

Los Angeles is the only town of importance in the county: San Gabriel, Soledad, Anahime, and Wilmington are growing towns, but all small.

SANTA BARBARA.—Along the coast line and west of Los Angeles county is the county of Santa Barbara, with an area of 4,572 square miles; of which 432 square miles are contained in six islands lying off the coast, in the Pacific ocean. This county is among the largest ones in the State, being as large as the combined area of the States of Delaware and Rhode Island, larger than the Papal States, and four times as great as the area of the Duchy of Brunswick. It is bounded on the west and southwest by the Pacific ocean, north by San Luis Obispo, east by Los Angeles, and south by the Santa Barbara channel. The population of the county is 7,784; of whom 6,538 are native born and 1,246 are of foreign birth. Santa Barbara, a town first settled in 1780 by the Jesuits, and beautifully located near the ocean, and the present county-seat, is the only place of importance in the county. Carpenteria, Alamo, Inas, and San Buenaventura are growing towns.

The climate of this section is unsurpassed in the world; with the exception of four months, during which light rains fall at intervals, the entire season is perpetual sunshine. Frost and snow are unknown, and the prevailing west winds of summer from the Pacific ocean temper the atmosphere, and, without being too hot or too cool, make it bracing and most invigorating. No part of Italy or the most favored portions of the globe surpass this and adjoining counties in climate.

All the semi-tropical and many of the tropical fruits grow to great perfection; and general agriculture and stock-raising are prosecuted with great success. The soil is rich and covered with luxuriant native grasses, wild oats, and flowers. No part of the State is better adapted to fruit and nut-growing than this county. The orange, fig, and lemon produce most abundantly.

So far no mines of importance containing the precious metals have been discovered, but asphaltum, sulphur, and other minerals are obtained. There are in the county forty-five thousand acres of land under cultivation; four hundred and thirty thousand grape vines; twenty-eight thousand olive trees, (the whole number of olive trees in the State being but thirty-four thousand;) also one hundred and fifty thousand sheep, producing annually six hundred and fifty thousand pounds of wool. This county and Los Angeles produce one-half of all the corn grown in the State, and Santa Barbara grows annually more than one-third of the bean crop of California. Wheat, barley, and corn grow well. There are two hundred and twenty thousand bushels of barley and two hundred and seventy thousand bushels of corn produced yearly. The county is altogether prosperous, and possesses great natural resources for the building up of permanent wealth.

San Luis Obispo.—North of Santa Barbara, and on the line of the Pacific ocean, is the county of San Luis Obispo, with an area of three thousand two hundred square miles, and a population of 4,772; of whom 3,833 are native and 939 of foreign birth. It is bounded on the west by the Pacific ocean, north by Monterey, east by Kern county, and south by Santa Barbara county.

The climate of this county is similar to that of the counties lying south of it. Rains fall to some extent during winter, at which season fields of grass and grain are all green. Frost and snow are unknown, and summer is a protracted season of eight months of beautiful sunshine and clear sky, without a drop of rain falling. Like the rest of the Coast Range, the atmosphere is tempered by the prevailing west winds from the ocean. The surface is a succession of rolling hills, high mountains, and beautiful valleys covered with grass, flowers, and wild oats. Forest trees are scarce. The soil is rich and most productive. All the semi-tropical and many of the tropical fruits grow to perfection. The lemon, fig, olive, orange, almond, walnut, and the mulberry tree all do well.

No mines of importance have yet been discovered in San Luis Obispo county, which may be regarded as strictly an agricultural region. There are no towns of consequence in this section; the town of San Luis Obispo, beautifully situated in a fertile valley nine miles from the ocean, and the seat of an early Spanish mission, is the present county-seat and the only place of any size in the county.

The enclosed land in the county is one hundred thousand acres, and twenty thousand acres are under cultivation. There are in the county thirty-five thousand sheep, ten thousand horses, and twenty-five thousand cattle. Dairying and sheep and stock raising are carried on extensively. There are produced annually five hundred thousand pounds of wool, three hundred thousand pounds butter, and three hundred and fifty thousand pounds cheese. The county in climate, soil, and resources has many attractions.

MONTEREY.—North of San Louis Obispo, bounded on the west by the Pacific ocean, north by Santa Cruz county, northeast and east by Merced, Tulare, and Fresno counties, and south by San Louis Obispo county, is the county of Monterey, with the old historic town of Monterey, once the Mexican territorial capital, for the county-seat. This ancient town was settled by the Jesuit missionaries in 1770, and for more than three-quarters of a century was the most important point upon the Pacific coast north of Panama. Here it was that Commodore Sloat, of the United States navy, on July 7, 1846, hoisted the American flag, and declared as United States territory that vast area forming California, Utah, Nevada, Colorado, Wyoming, and the greater part of Arizona.

The area of Monterey county is 4,356 square miles: it is within a fraction of the size of the State of Connecticut, and is 930 square miles greater than the combined area of the States of Rhode Island and Delaware. The total population of the county is 9,876; 7,670 being native Americans and 2,206 of foreign birth. The city of Monterey has a population of 1,112. It is beautifully located near the southern end of the spacious Bay of Monterey, where the surrounding country is most charming. The climate of the county is perpetual summer; the soil is rich and productive in all the semi-tropical and many tropical fruits; agriculture and grazing are the chief industries of the people. The country is better wooded than that farther south, and the "Monterey cedar," a most beautiful ornamental tree, grows abundantly. Salinas and other valleys contain large areas of most productive lands. Hollister, Castroville, and Salinas City are prosperous towns.

There are one hundred and ten thousand acres of land cultivated in the county; and five hundred thousand bushels of wheat and one million bushels of barley produced annually. Corn, peas, and oats grow well, and one-third of the tobacco grown in the State is produced in this county. There are thirty-six thousand cattle in the county, producing one hundred and fifty thousand pounds of butter and one million eight hundred thousand pounds of cheese annually: more than one-third of the cheese produced in the State is made in this county. There are two hundred thousand sheep, producing six hundred and fifty thousand pounds of wool annually. Bees thrive well, there being more than seventy thousand pounds of honey produced yearly in the county. The grape grows luxuriantly, there being one million vines in the county; the olive, mulberry, almond, fig, and lemon grow, but the orange has not yet been cultivated to any extent. No mines have been discovered in this county, which is one of the best agricultural regions in the State.

SANTA CRUZ.—Bounded west by the Pacific ocean, north by San Mateo, east by Santa Clara, and south by Monterey, is the county of Santa Cruz, containing 432 square miles, and a population of 8,743; there being 6,758 native Americans and 1,985 of foreign birth. The town of Santa Cruz, situated at the southern end of the county, and facing the lovely Bay of Santa Cruz, has a population of twenty-five hundred, and is the county-seat. The sea-beach here is lovely, and Santa Cruz is fast becoming a fashionable place of resort for sea-bathing.

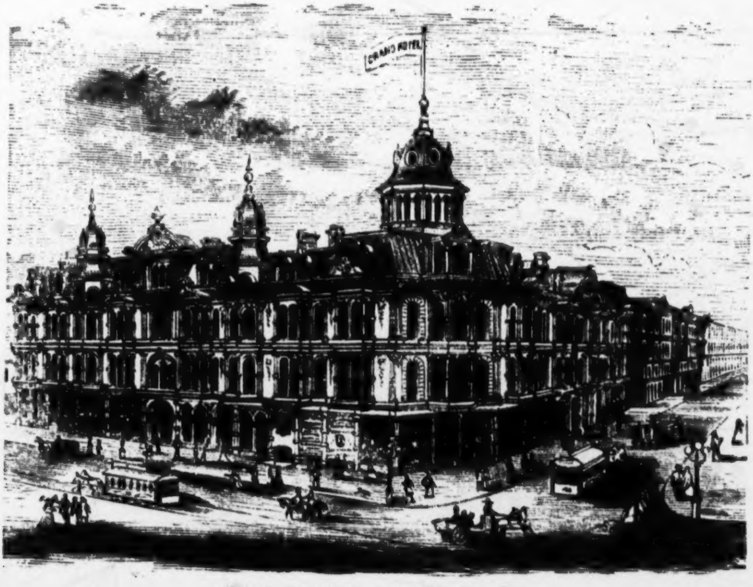
The physical character of this county differs materially from that of the counties farther south. It is a little cooler, more rain falls, and the surface is generally rugged and much of it covered with forest trees of great magnitude and value, some of which grow to fifty feet in circumference; redwood, cedar, oak, ash, laurel, and fir are abundant. There are, however, many rich valleys, and the pasture range is excellent, as the fogs from the ocean keep vegetation green the greater part of the year. The climate is perpetual summer, and semi-tropical and tropical fruits thrive. Dairying, lumbering, and agriculture are the chief pursuits of the people. There are eighteen thousand acres of land cultivated, producing one hundred and ten thousand bushels of wheat and one hundred thousand bushels of barley. One-third of the buckwheat raised in the State is grown in this county. The grape, orange, olive, mulberry, almond, walnut, lemon, fig, and fruits generally, do well. There are seven thousand cattle in the county, and one hundred thousand pounds of butter produced annually.

Lumbering is carried on quite extensively, there being twenty-seven saw-mills in the county. There are numerous tanneries, lime-kilns, and a paper and powder mill at the town of Santa Cruz.

SAN MATEO.—On the coast line, directly north of Santa Cruz county, bounded on the west by the Pacific ocean, north by the county of San Francisco, east by the Bay of San Francisco, and south by Santa Clara county, is the county of San Mateo. As will be seen, this county is situated upon the peninsula lying between the ocean and the Bay of San Francisco. The climate is much cooler, both in summer and winter, than in the counties farther south, but frost is almost unknown, and snow never falls; and most of the semi-tropical fruits grow well. On the coast the damps and fogs keep the grass green all summer, and the effects of drought are but little known. The surface of the country is rugged, and its southern half covered with forests of redwood, fir, cedar, oak, and other valuable timber; but the northern end of the county is rolling hills and small valleys, covered with grass and wild oats, but entirely destitute of trees. Large areas of the county are fit for agriculture and grazing. Dairying and lumbering are carried on to a considerable extent. Gold, in small quantities, has been discovered, but no mines of importance have yet been developed. During the early part of 1871, quartz veins, containing gold, silver, and lead, but abounding in the latter, had been opened quite close to the Bay of San Francisco, and within five miles of the city of San Francisco. The area of the county is four hundred and thirty-two square miles. There are eighty-five thousand acres of land cultivated, and four hundred and fifty thousand bushels of wheat, five hundred thousand bushels of barley, three hundred thousand bushels of oats, twenty-two thousand bushels of beans, six hundred thousand bushels of potatoes, thirteen thousand pounds of hops, twenty-four thousand tons of hay, thirteen thousand bushels of onions, two hundred and twenty-five thousand pounds of butter, and two hundred and fifty thousand pounds of cheese produced annually. Great variety and quantity of fruit and vegetables are produced for the San Francisco market. The grape, lemon, fig, walnut, almond, mulberry, olive, and orange are grown, but do not thrive so well as in the counties farther south. There are fifteen thousand five hundred cattle in the county, twenty-five miles of railroad, and seventeen saw-mills, the latter producing large quantities of lumber. This county furnishes San Francisco with its chief supply of milk and water. Redwood City, a small town upon the line of railroad from San Francisco to San José, is the county-seat. The railroad from San Francisco to San José and other points south passes through the whole length of the county. There are no towns of importance in San Mateo: Belmont, Menlo Park, and San Mateo, all upon the railroad lines, are thriving towns. The population of the county is 6,635, of whom 3,493 are native and 3,138 are of foreign birth.

San Francisco.—The county of San Francisco, in which is situated the city of San Francisco, the great mercantile emporium of the Pacific coast, and the third commercial city in the United States, contains an area of forty-two square miles, and embraces the narrow peninsula between the Pacific ocean and the Bay of San Francisco. It lies south of the Golden Gate, and the northern point of the county, upon which is situated the city of San Francisco, is a succession of rugged hills, sand ridges, deep gulches, and green valleys. On the southern side, adjoining San Mateo county, the surface is covered with grass and the soil is rich, but there are large ranges of mountains; while on the western side, facing the Pacific ocean, shifting mountains and hills of white sand, carried from the shore of the Pacific ocean inland for miles by the strong prevailing west winds of summer, give a wild and desolate appearance to a wide section entirely barren and destitute of trees.

OLD CITY HOTEL, 1846, CORNER OF KEARNEY AND CLAY STREETS.
(First Hotel in San Francisco.)



GRAND HOTEL, SAN FRANCISCO, 1873.

The sand beach for miles at this point is hard, level, and clean, affording an elegant and romantic drive, with rolling ridges of sand on the east and the broad Pacific on the west. At this point, and seven miles from the city, is the "Cliff House," where the great sea-lions perch upon their sea-beaten rocks, and are objects of admiration and wonder to the new-comer. A fine macadamized road from the city to this point forms the chief drive for the pleasure-seekers of the great metropolis.

The Bay and the present site of San Francisco was first discovered on the 9th of October, 1769, by Governor Portala, the Mexican pioneer, and his associates, who made a journey by land from Monterey northward, planting the cross among the Indians. Seven years later the mission of San Francisco was founded, and in 1836 the first house was built where now stands the magnificent city of San Francisco. The growth and commercial importance of the city has kept on steadily and with astonishing rapidity increasing until, in elegance, it is not surpassed in America. High hills have been levelled down and flung into muddy holes and deep ravines; parks laid out and ornamented, wide and pleasant streets well paved, water and gas conducted everywhere, horse railroads running in every direction, pleasure-gardens, play-grounds, public halls, theatres, churches, schools, libraries, banks, hospitals, colleges, foundries, factories, and all the appliances of modern civilization maintained upon the broadest principles.

The city of San Francisco is substantially built with brick and wood. Few houses exceed four stories in height: the dread of earthquakes check building to a greater elevation. In the business centres the buildings are all made of brick or stone, and many elegant structures with iron fronts painted white adorn the city. There is not a city in the United States where so much glass is used in buildings; almost the entire fronts of all the fine stores, hotels, and offices are elegant plate glass running from the ceilings to the street, at once giving an attractive appearance to the city and light and comfort within.

Some idea of the Pacific metropolis may be had from a brief inspection of the leading features of the component parts of the city and its population as demonstrated by the federal census of 1870. At that period the real and personal property in the city was valued at $265,000,000. There were at the same time 25,300 houses in the city, and 36 banks having $25,000,000 on deposit; 50 miles of street railroad; 800 manufacturing establishments, employing $18,000,000 and producing $45,000,000 in value annually; 36 halls, 45 wharves, 8 theatres, 87 apothecaries, 600 lawyers, 70 book stores, 325 shoemakers, 33 brewers, 420 brokers, 370 butchers, 27 cigar importers, 64 cigar factories conducted by whites and 34 Chinese cigar factories, employing 4,500 Chinese and 300 white men, and producing annually 70,000,000 cigars valued at $3,000,000; 450 retail cigar stores, 42 coffee-houses, 71 confectioners, 60 dentists, 200 dressmakers, 30 foundries, 220 fruit dealers, 700 groceries, 13 hospitals, 200 hotels, 200 incorporated companies, 76 insurance companies, 147 jewellers, 68 laundries; 2,100 saloons, which, with the 700 retail groceries, make 2,800 places for the sale of liquors; 450 lodging houses, 750 merchants, 100 Chinese merchants, 88 newspapers, 30 photographic galleries, 450 physicians, 145 restaurants, 37 steamboat lines, 100 music teachers, 73 churches, 5 Jewish synagogues, 14 Joss-houses, 241 benevolent societies, 62 protective unions, 12 literary and historical societies, 40 military companies, and 41 social clubs.

Not the least remarkable in the development of this youngest but most active and progressive American city is the composition of its citizens. Scarcely a spot on earth, from the metropolis of London to Iceland and Fiji, but is represented in San Francisco. Here the strangest physical and mental types of the race are found, each leaving its imprint upon the institutions and rising generation of the country.

To the European or the people of the Atlantic States, where the growth of great cities is the result of centuries, the sudden springing into existence of the great commercial city of San Francisco seems like fiction. Thirty-seven years ago not a sign of human life marked the spot where now stands this proud metropolis. In 1836, the first humble house was built; and during the succeeding eleven years but four hundred and fifty-nine persons had congregated about the shores of the Bay of San Francisco. But potent agents soon awoke the slumbering nations to cross deep seas and arid plains to build up the giant city of the Far West. The starry ensign of the new nation of freedom was hoisted in 1846, and the charmer, *gold*, was discovered in 1848.

From a population of 459 in 1847, San Francisco had swelled to 34,776 in 1850. In 1860, the city had 56,802 population; and, in 1870, it had reached 149,473—an increase of almost 166 per cent. in ten years; and the increase is still marked by indications of steady and rapid growth.

The population of the city is about one-quarter of the population of the whole State, and has grown entirely out of proportion to the population of the country chiefly from the fact that it has been the great distributing point of all the merchandise from Mexico to Alaska, on the coast. Now that the continental railroad has opened interior avenues of supply, and the overland railroad building from Lake Superior to Washington Territory will form a short connecting link between the Atlantic seaboard and the finest harbor in America, inviting the commerce of Asia to the new port of the West, Puget sound, some division of San Francisco's protracted monopoly of commerce may reasonably be expected.

The composition of the population of San Francisco presents many features of striking interest: perhaps no other city of importance in the United States or in any other part of the world contains more foreign than native voters. The registered voters of the city in 1870 aggregated 36,410, of whom 16,205 were native and 20,205 were adopted citizens: showing 4,000 more naturalized than native citizen voters in the city. Of the voters at this time 352 were colored, all native.

The total population was composed of 75,824 adult males, 61,577 adult females, 23,722 males under fifteen years of age, and 23,261 females under fifteen years. Of the population, 18,346 males and 18,219 females were born in California; and the Chinese population was 11,810, of whom 9,777 were males and 2,040 were females. Of the males, 877 were under fifteen years of age, and 271 females were under fifteen; of the Chinese residents, 189 males and 131 females were native-born Californians. The colored population was 1,094, of whom 626 were males and 468 were females;

SAN FRANCISCO DESTROYED BY FIRE, DECEMBER 24, 1849; MAY 4, 1850; MAY 4, 1851; JUNE 22, 1851.

SAN FRANCISCO FROM THE BAY IN 1847.

of the colored population, 95 males and 84 females were born in California.

San Francisco is the tenth city in population in the United States, being surpassed only by New York, Philadelphia, Brooklyn, St. Louis, Chicago, Baltimore, Boston, Cincinnati, and New Orleans. To give an idea of the cosmopolitan character of the 149,473 forming the population of San Francisco, of whom 75,754 were native Americans and 73,719 were of foreign birth, a complete analysis of the component parts in 1870 is here given. The native-born represented the republic as follows: Alabama, 347; Arkansas, 35; California, 38,491; Connecticut, 850; Delaware, 149; Florida, 30; Georgia, 97; Illinois, 756; Indiana, 261; Iowa, 175; Kansas, 13; Kentucky, 447; Louisiana, 851; Maine, 2,650; Maryland, 876; Massachusetts, 7,147; Michigan, 305; Minnesota, 73; Mississippi, 119; Missouri, 664; Nebraska, 11; Nevada, 218; New Hampshire, 750; New Jersey, 871; New York, 12,612; North Carolina, 127; Ohio, 1,116; Oregon, 219; Pennsylvania, 2,635; Rhode Island, 489; South Carolina, 195; Tennessee, 220; Texas, 78; Vermont, 661; Virginia and West Virginia, 673; Wisconsin, 346; Alaska, 23; Arizona, 4; Colorado, 1; District of Columbia, 231; Idaho, 11; Indian Territory, 1; Montana, 1; New Mexico, 4; Utah, 21; Washington, 72; Wyoming, 2. The foreign population represented the different nations as follows: Africa, 25; Asia, 20; Atlantic islands, 164; Australasia, 914; Australia, (proper,) 476; Belgium, 139; Bohemia, 43; Canada, 1,154; New Brunswick, 401; Newfoundland, 39; Nova Scotia, 437; Prince Edward island, 44; British America, (not specified,) 290; Central America, 44; Cuba, 28; Denmark, 593; France, 3,547; Baden, 789; Bavaria, 1,101; Brunswick, 21; Hamburg, 610; Hanover, 1,182; Hesse, 684; Lubeck, 5; Mecklenburg, 42; Nassau, 24; Oldenburg, 56; Prussia, 7,578; Saxony, 318; Wurtemberg, 598; Germany, (not specified,) 594—(total, Germany, 13,602;) Gibraltar, 1; England, 5,172; Ireland, 25,864; Scotland, 1,687; Wales, 247—(total of Great Britain and Ireland, 32,998;) Greece, 27; Holland, 190; Hungary, 61; India, 17; Italy, 1,622; Malta, 2; Mexico, 1,220; Norway, 390; Pacific islands, 57; Poland, 517; Portugal, 199; Russia, 281; Sandwich islands, 51; South America, 418; Spain, 119; Sweden, 780; Switzerland, 775; Turkey, 7, the West Indies, 207; China, 11,711; and Japan, 8.

In the public schools of the city there were 23,552 pupils; of whom 11,796 were boys and 11,756 were girls: in one school building alone 1,150 boys were in attendance. Notwithstanding, there were 5,667 adults in the city who could not read or write. It must, however, inspire the friends of republican America to know that but nine of these illiterates were native-born Americans, only two of whom were women. At the head of the list of the unlettered stands Ireland, with 4,885; then follows Italy, with 258; Mexico, 283; Chili, 44; West Indies, 73; England, 29; Poland, 33; Portugal, 23; and 40 negroes. The Chinese are not found in these numbers of uneducated, as all Chinese read and write their own language.

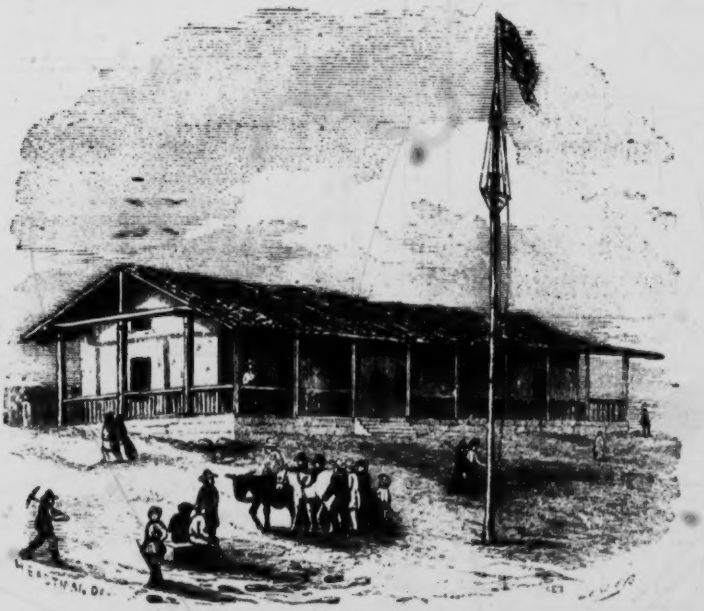
The federal census of 1850 gave the population of California at 92,597; of whom 70,340 were native, 21,802 were foreign, and 455 unknown. In 1860, it was 379,994, there being 233,466 natives and 146,528 foreigners. The population of 1870 was 560,247; of whom 350,416 were native American and 209,831 were of foreign birth. Of the native population, 323,507 were the offspring of foreign parents in full or in part, and 295,723 were of foreign father and mother. It will be seen that in the whole population of the State there are but 140,585 more native than foreign born: this is the largest proportion of foreign population in any State in the Union. Wisconsin comes next to California, with 690,320 native and 304,845 foreign population. The smallest proportion of foreigners in any State is found in North Carolina, which, with a population of 1,071,361, had but 3,029 foreign residents according to the last federal census.

The Chinese population of California in 1870 was 49,277, and the colored population 4,272. There were also 33 Japanese in the State. How surely the modern civilization of the white man exterminates his red brethren may be understood from the fact that, in 1860, the Indian population of California was 17,798, whereas, in 1870, it was but 7,241. Verily the hatchet of the red man is buried in the West, but with it the hand that once so fiercely wielded it.

The evidence of the material growth of the commercial and social affairs of California, and its city by the sea occupying the site of the recent little Spanish village of *Yerba Buena*, to be realized must be seen, studied, and known, as represented in the material development of San Francisco, whose elegant hotels, dwellings, stores, schools, theatres, libraries, halls, markets, buildings, and streets so delight and surprise visitors; and the social, intellectual, and moral status of the people gathered by intercourse and study of its dignified judges, able lawyers, shrewd merchants, keen speculators, industrious mechanics, celebrated artists, eloquent orators, terse writers, unscrupulous politicians, pious preachers, charitable people, and animated youth.

San Francisco fairly represents the social and material condition of the people of the whole State. Here may yet be found, as well as the more modern institutions, traces of the earlier society developed under the stimulus of gold and remoteness from the centres of civilization. Every thing that can be seen in any large city in the world is met with in San Francisco, and a great many things entirely unknown elsewhere may be seen in the metropolis of the Golden State. With the industrious, virtuous, and honest may be found the most singular developments of animal life. They came across deep seas and over arid plains—the sober, industrious, lively, happy, talkative, prosperous, ambitious, pious, charitable, noble, and generous, and the idle, vain, silly, stupid, shrewd, dull, cunning, profane, eccentric, reckless, morose, solitary, stolid, miserly, bigoted, slandering, sly, deceptive, and pilfering; here the loafer, the dandy, and the man with his organ and monkey are to be seen, as in every other city in the world; besides a large class of beings whose origin and history, beginning in distant parts of the globe, under the sky of republican freedom or the dome of monarchal tyranny, bud forth in fruitful intensity in the freedoms of the newest societies of the new world.

It must also be admitted that the staid order of older communities, in wealth and society, has not been easily maintained in a land where a day's development in a mine, a turn in stocks, or manipulation of a Spanish grant, may elevate to social and financial greatness the veriest clown, or sink into complete obscurity the



CUSTOM HOUSE, ON THE PLAZA. RENT $7,000 A MONTH IN 1849.

POST OFFICE, CORNER OF CLAY AND PIKE STREETS, SAN FRANCISCO 1849.

noblest of the race. Gold everywhere has its acknowledged dignity and power in the affairs of mankind, and in no part of the globe has the tricks, fickle gildings, and strange metamorphoses of this tyrant been more felt than in the new communities of the Pacific coast.

The feverish excitement of the early days of gold-mining in California have, to great extent, passed away. The cool brow and steady hand of agriculture silently lift the laurels of peace and plenty over the deserted camp of the early gold-hunter; roving bands of bearded pilgrims have settled down to ordered employments and new social life as the heads of happy families, blessed with the smiles of innocent youth; the noisy din of the early mining-camp is turned to social order, where the gentle influence of woman and the wise counsels of man mould a new order in the directions of purity and progress.

In California, the easy, genial sociability of the people must not be confounded with gross and vulgar familiarity; on the contrary, a more polite, courteous, and dignified people are not to be found in America. As a rule, *individuality* asserts its dominion with greater ease and less display than in any other land. The dignity of labor has here raised higher its monument than elsewhere. Architects from every hemisphere have added to its column; and toilers from every sphere of life have placed a stone in its concrete structure and bowed before its majesty.

In San Francisco, and in every town throughout the Pacific coast, order, law, safety of person and property are established and maintained; and ample facilities for the enjoyment of life. cultivation of the intellect, and religious worship afforded. The population is as firmly rooted to the soil as is the people of any part of the globe; and the institutions of the country are founded upon broad, comprehensive, and equitable principles, shorn of the narrow proscriptions of bigots and fanatics, so often found in many of the older settled parts of the world. The recognized elements of regulated society have, in every section of the coast, usurped the disordered and unsettled customs of earlier periods, and the new societies of to-day count in their composition a vast number of the most thoughtful and progressive people of the republic. Every town and village on the Pacific coast has now its churches, schools, libraries, newspapers, societies, and active, intelligent men and women: persons thoroughly imbued with the necessity of utilizing the material of youth to the growing importance of the age.

Whoever doubts the intelligence of the people of the Pacific coast, let him turn to the chapters on education and schools in this volume; let him also see the circulation of newspapers, and know that in its *newspaper press* California is at the head of every community in the world. No part of progressive New England nor of America issues from the newspaper press, in proportion to population, as does the Golden State. California, with her population of but 560,247, a large percentage of whom do not read the English language, (Chinese,) maintains 223 newspapers and periodicals, 40 of which are dailies and 183 weekly and other publications.

New York, with a population of 4,382,759, eight times that of California, issues but 657 papers of all classes, 89 only of which are daily; whereas if this State maintained a newspaper press equal to that of California, in proportion to her population, it would be 1,820 instead of 657.

Massachusetts, with a population of 1,457,351, and the accumulated learning of centuries, has but 186 newspapers, only 21 of which are daily, while California has 40 of this latter class. It will be seen that even Massachusetts is far behind California, maintaining only a little over one-fourth as many newspapers as the latter in proportion to her population.

The State of Maine, with a population as large as that of California, has but 54 newspapers, only six of which are daily, against 40 dailies in California.

There are only two States in the whole Union having more *daily* newspapers than California: New York, with 89, and Pennsylvania, with 61; while California has 40. The Golden State stands fifth in the list of all the States in the aggregated number of newspapers, as follows: New York, 657; Pennsylvania, 471; Illinois, 409; Ohio, 331; California, 223. Delaware, with one-quarter the population of California, has but *one daily newspaper;* and Florida, with one-third, has but the same—a solitary daily paper. The whole number of newspapers published on the Pacific coast is 305, of which California has 223, there being 88 of every description in the city of San Francisco alone; the remainder being divided as follows: Oregon, 32; Nevada, 12; Washington Territory, 15; Idaho, 6; Utah, 9; Arizona, 2; Alaska, 1; and British Columbia, 5.

California has a newspaper for every 2,500 of her people. The aggregate number of newspapers in the republic is 6,100, and the population 38,555,983; this is but one paper to each 7,000, and if the number throughout the Union was in proportion to the number in California, instead of 6,100 newspapers there would be 16,400 in the country.

MARIN.—Directly north of the county of San Francisco, and divided from it by the Golden Gate and the waters of the Bay of San Francisco, is Marin county, with an area of five hundred and seventy square miles. The surface is rugged hills, alternating with numerous small valleys; the hills in some places are well wooded, and there are innumerable springs and creeks. As a grazing field it is unsurpassed; wild oats and native grasses grow luxuriantly, and the rains of winter and fogs of summer keep a large part of the county a field of perpetual verdure. The largest and most complete dairies in the world are in this county, at one of which 2,500 milch cows are kept. The total number of cattle in the county is 25,000: of this number 17,000 are milch cows; and although there are 230,000 milch cows in the State, yet Marin county, with 17,000, produces 1,800,000 pounds of butter, or more than one-third of the whole annual product of the State. There are also 400,000 pounds of cheese made in the county annually, and varied branches of agriculture and fruit-growing are prosecuted. The climate is perpetual summer; the temperature varies but little from sixty-five degrees the whole year, and the heat of summer is never felt. Marin county is bounded upon the west by the Pacific ocean, north by Sonoma, east by San Pablo and San Francisco bays, and south by the Golden Gate. Olema, Bolinas, San Quentin, Saucelito, and San Rafael are the principal towns. The population of the county is 6,903; of whom 3,761 are native American and 3,142 of foreign birth. The population of San

Rafael, the county-seat, is 831. Paper and powder are manufactured in the county, and at the town of San Quentin is located the State prison. No minerals of any description have yet been discovered in Marin county.

SONOMA.—North of Marin county, bounded upon the west by the Pacific ocean, north by Mendocino, northeast and east by Lake and Napa, and south by Marin, is the county of Sonoma, containing 1,400 square miles—94 square miles more than the State of Rhode Island. The population of the county is 19,819; of whom 15,656 are native born and 4,163 are of foreign birth. Santa Rosa, the county-seat, has a population of 2,901. This county is accessible by water from the Bay of San Francisco, and upon the ocean from the waters of the Pacific. The county is diversified with rolling hills and rich valleys; considerable oak, cedar, madrona, and other trees grow. The soil is rich beyond comparison, and the country generally is one of the most lovely spots in the world. Upon the sea-coast the summer is cool, but in the southern and central portions it is warm; nothing can surpass the bright, sunny days of summer in this charming section. Agriculture is the chief business of the people, and the grape attains great perfection and is cultivated extensively. The orange and fig grow well. In the production of grapes and wine, Sonoma is surpassed in the State only by the county of Los Angeles. The number of grape-vines in the county is 3,500,000. Large quantities of grapes reach the San Francisco market from this section, and there are 500,000 gallons of wine and 10,000 gallons of brandy produced in the county annually. Sonoma is surpassed only by one county in the State in producing apples, and is third in the production of peaches and plums. It has the largest area of land enclosed (460,000 acres) and the largest number of acres cultivated (250,000) of any county in the State.

There are 1,900,000 bushels of wheat, 325,000 bushels of barley, 100,200 bushels of corn, 300,000 bushels of oats, 270,000 bushels of potatoes, 160,000 pounds of wool, 250,000 pounds of cheese, and 650,000 pounds of butter produced in the county annually. There are in the county 53,000 sheep, 14,000 horses, and 40,000 cattle; eight grist-mills and sixteen saw-mills. There are but four counties in the State having a larger value of real and personal property. Copper and quicksilver have been found in Sonoma, but not in any great quantity; no mines of gold or silver have yet been worked. The celebrated *Geysers* and hot and numerous sulphur springs are in this county. Sonoma is one of the most lovely and most prosperous sections of California. Petaluma, Sonoma, Santa Rosa, Healdsburg, Bodega, and Cloverdale are the principal towns.

MENDOCINO.—On the sea-coast, bounded west by the Pacific ocean, north by Humboldt and Trinity counties, east by Tehama, Colusa, and Lake, and south by Sonoma and Lake, is the county of Mendocino, with an area of 3,816 square miles—three times the area of the State of Rhode Island—and a population of 7,545; there being 6,147 native Americans and 1,398 of foreign birth.

The surface of the county is rough, and the hills covered with dense forests of redwood, cedar, fir, and many other varieties; as a grazing region it is unsurpassed, and large areas of the best description of agricultural lands still remain unoccupied. Lumbering and stock-raising are carried on to considerable extent. The county is well watered, but there is no harbor of magnitude on the coast. Albion, Mendocino, Punta Arenas, and Ukiah are the chief towns: the latter, with a population of 965, is the county-seat.

There are 200,000 acres of land enclosed, and 84,000 acres cultivated; and 200,000 bushels of wheat, 300,000 bushels of barley, 20,000 bushels of corn, 15,000 bushels of peas, 500,000 bushels of potatoes, 200,000 pounds of hops, 150,000 pounds of butter, and 300,000 pounds of wool produced annually. There are in the county five grist-mills, twenty saw-mills; 10,000 horses, 3,500 mules, (the largest number of the latter in any county in the State,) 30,000 cattle, 25,000 hogs, and 200,000 sheep; Los Angeles county only surpassing it in the latter. No mines of importance have yet been discovered.

In winter the climate is several degrees colder than at San Francisco, and but few of the semi-tropical fruits grow well; but the grape and many varieties of fruit thrive well, and the climate generally is warm and delightful. The fogs from the ocean during summer keep the grass green, and as a grazing county Mendocino is unsurpassed in the State.

HUMBOLDT.—Bounded west by the Pacific ocean, north by Klamath, east by Trinity, and south by Mendocino, is Humboldt county, with an area of 2,800 square miles—580 square miles larger than the State of Delaware—and with a population of 6,140; of whom 4,646 are native Americans and 1,494 are of foreign birth. Eureka is the county-seat. The surface of the country is rugged; the hills are clad with dense forests of redwood and fir; the pasture ranges are wide and excellent, and there are many rich and fertile valleys in which the various branches of agriculture are carried on most successfully. Lumbering, grazing, and farming are all carried on to considerable extent. No mines of importance have yet been found. Rivers and creeks of great volume and purity water this section, and Humboldt bay affords an entrance to ships of large size. The soil is most productive, and nearly all the grains, fruits, and vegetables grow well. The county is celebrated for its yield of potatoes: 640,000 bushels (the largest quantity grown in any county in the State) are produced annually. Peas grow well: 70,000 bushels (more than half the product of the State) are grown in this county. It is also the third county in the production of oats. Dairying, stock-raising, agriculture, and lumbering are all carried on extensively; but the cultivation of the grape and the semi-tropical fruits of the southern portion of the State has not been much prosecuted. The climate like that of the greater portion of the State is perpetual summer; snow falling only upon the high mountains, while the valleys below are perpetual verdure. Summer heats are never oppressive, the cool breeze off the ocean keeping the temperature even, and the fogs and damps keeping vegetation green. Railroads building from the southern portion of the State, soon to connect this section by rail with San Francisco, will develop the great natural resources of this section.

KLAMATH.—North of Humboldt county, and bounded upon the west by the Pacific ocean, north by Del Norte, east by Siskiyou, and south by Humboldt, is Klamath county, with an area of two thousand square miles, and a population of 1,686. It is the only county but one in the State having more foreign than native inhabitants, there being 893 of the former and 793 of the latter. The country is mountainous in the extreme; the hills are covered with dense forests of valuable timber, and the valleys with luxuriant grass. There are many rich valleys; and mines of gold, silver, copper, and other metals are worked successfully. Upon the ocean-beach the sands are washed for gold, and in some places pay well: each rise of the tide and each surge of the sea brings up new grains of gold, so that the work of extracting the precious metal from the sands goes on continuously. There is no good harbor on the coast line of this county. Trinidad bay affords some shelter and good anchorage. The county is well watered; but, owing to its mountainous character and its remoteness and want of means of transportation, its resources are but little developed. Orleans Bar, a small mining-camp, is the county-seat. Sawyers Bar and Trinidad are the only other places of any importance in the county. The climate is good: in winter, considerable depth of snow falls in the mountains, but the valleys are open and cattle graze at large throughout the whole year. The rainfall is three times as great on the coast of this county as it is in the vicinity of San Francisco. Snow in the mountains and rain in the valleys make up winter, while summer is long, dry, and charming. Wheat, oats, barley, vegetables, and most of the fruits grow abundantly,

Del Norte.—Bounded west by the waters of the Pacific ocean, north by the Oregon State line, east by Siskiyou, and south by Klamath, is the county of Del Norte, the most northern county in the State, and the last upon the sea-coast line or coast counties. The area of this county is 1,440 square miles—134 square miles greater than the State of Rhode Island. The population of Del Norte is 2,022, there being 1,580 native Americans and 442 foreigners. The principal towns are Altaville, Happy Camp, and the county-seat, Crescent City. Close to the ocean at this point steamers and vessels find anchorage, but there is no harbor of safety. The rainfall in this county is three times as great as at San Francisco; snow falls in the mountains to considerable depth in winter, and frost is keenly felt, but the cold weather is of short duration, and in the valleys pasturage is green, and sheep, cows, and horses graze at large during the whole year. Along the sea-coast the damps from the ocean keep the air cool in summer, but inland it is warm during the summer months. The surface of the country is rough; the hills and mountains are covered with dense forests and undergrowth. Throughout the county there are many rich valleys and wide pasture-ranges. Mines of gold, silver, copper, and other minerals are found, and mining is carried on to considerable extent, there being many rich gold quartz mines in this section. On the ocean-beach the sands are washed for gold, in many instances with profit: the agitation of the waves at each storm seems to throw up new deposits of gold-dust, affording a continuous field for the labor of the miner.

The county is well suited to the various branches of agriculture. Wheat, oats, barley, and fruit grow well; and even in this extreme northern section of the State the grape, lemon, fig, walnut, and orange are cultivated, although the semi-tropical fruits, so far, are not grown to any extent, and do not thrive so well as farther south; indeed, none of the semi-tropical fruits grow to any extent in this section.

## CHAPTER XXIX.

Interior and valley counties—Resources, climate, and population—Siskiyou—Trinity—Shasta—Tehama—Butte—Colusa—Yuba—Sutter—Yolo—Lake—Napa—Solano—Sacramento—Contra Costa—Alameda—San Joaquin—Stanislaus—Santa Clara—Merced—Fresno—Tulare—Kern—San Bernardino.

Leaving the coast range of counties, and going interiorward, adjoining the southern Oregon State line, is found a range of counties embracing, in the northern portion, a high mountainous region, and, extending southward, occupy a large section of the foot-hills of the Sierras, and still further south embrace the great valleys and agricultural districts of the State. A great variety of climate and resources is found in this chain of counties, stretching from Oregon to Mexico, a distance of seven hundred miles. In the section of these counties in the Sierras snow falls to a great depth, and winter wears a stern frown for three months of the year, while through the central and southern portions snow is never seen, and toward the Mexican line it is tropical, and great heat and drought prevail throughout the long, dry summers. To distinguish these counties from the others in the State, they are known as the

### INTERIOR AND VALLEY COUNTIES,

The first of which, beginning at the Oregon State line, and facing southward, is

Siskiyou—Bounded north by the southern State line of Oregon, east by the State of Nevada, south by Lassen, Shasta, and Trinity counties, and west by the coun-

A BUFFALO HUNT ON THE PLAINS.

ties of Klamath and Del Norte. This is one of the largest counties in the State, having an area of 8,740 square miles—equal in extent to the combined area of the Kingdom of Wurtemberg, the Duchy of Anhalt, and the Principality of Lichtenstein, and within a fraction of the size of the territory of the States of Rhode Island and Massachusetts combined.

The population of Siskiyou county is 6,848; of whom 4,321 are native American and 2,527 are of foreign birth. The face of the country is a succession of mountains, valleys, forests, lakes, and rivers. There are many large and rich valleys, yielding most abundantly of wheat, oats, barley, potatoes, fruits, and berries; and several large lakes and rivers supply the county with water, and large areas of pasture range making it a superior location for stock-raising. The mountains are high, and, in winter, covered with great depth of snow. The famous *Mount Shasta*, 14,440 feet above the sea-level, is in this county.

Mines of gold, in placer and quartz, are worked with profit, and mines of great richness are in course of development. The resources of the county are varied, and consist of agriculture, fruit-growing, lumber, grazing, and mining.

The climate is colder in winter than in any other section of the State, but never so cold that horses, sheep, and cattle cannot pasture in the valleys throughout the whole year. Summer is delightful in this region, and in some sections it is quite warm; but altogether the climate is mild and beautiful. A line of railroad, intended to run from the Sacramento valley to Oregon, will pass through this county, and will greatly develop its varied resources. There are no cities or towns of any importance in Siskiyou. Yreka is the county-seat.

Turning southward from Siskiyou, a description of all the counties embraced between the coast tier and the range along the Sierras, embracing mountain, valley, and "bay counties," and representing the great agricultural centre of the State, will be here given.

TRINITY.—Bounded upon the north by Klamath and Siskiyou, east by Shasta and Tehama, south by Mendocino, and west by Humboldt, is Trinity county, with an area of 1,800 square miles, and a population of 3,213, consisting of 1,397 native Americans and 1,816 foreigners. This county is known as a "mountain county;" its surface is rugged in the extreme. The mountains are clad in forests of oak, fir, and pine, and there are many beautiful and fertile valleys, and the county is well watered. Snow falls to considerable depth in winter, but cattle graze at large throughout the year. Placer and quartz mining are carried on to a considerable extent. The resources of the county are mining, grazing, farming, fruit-growing, and lumbering. Rain falls to a very great extent in winter; summer is mild, but warm. Wheat, barley, oats, corn, potatoes, and fruit grow well, and the grape, lemon, fig, and mulberry all grow in this section, but not so well as farther south.

There are but few towns of any importance in the county. Weaverville is the county-seat. The mines in this section, so far as worked, are river, surface, and bank. The greatest quantity of water used for mining purposes in any county in the State is used in Trinity. The principal mining in the county is done by Chinese large numbers of whom worked the surface-mines long since abandoned by the whites.

SHASTA.—Bounded north by Siskiyou, east by Lassen, south by Tehama, and west by Trinity, is the county of Shasta, with an area of 4,500 square miles, and a population of 4,173, divided between 2,937 native Americans and 1,236 foreigners. This county is within a fraction of the size of the State of Connecticut, and is more than three times as large as the State of Rhode Island, and equal to the whole Papal States. The surface is a succession of rugged mountains, deep ravines, and beautiful valleys. Mining, agriculture, grazing, fruit-growing, and lumbering are the chief resources of the county. There are more than one and a-half million grape-vines in the county, and the lemon, fig, and other fruits grow well. It is the best-watered section in the State. The head-waters of the Sacramento and innumerable other streams send out their branches in all directions through this county.

The climate of Shasta county is charming. In winter snow falls to a considerable depth in the mountains, and the weather is cold, but cattle graze upon the valleys and hill-sides throughout the year. The heat of summer is not intense, and the weather, generally, is delightful. But few towns of importance have yet grown in this county. Shasta is the county-seat. Coal and iron, as well as the precious metals, are found. The railroad building from the Sacramento valley to the State of Oregon will pass through this region, and will aid in developing its varied resources.

TEHAMA.—Approaching the valley of the Sacramento, and at the head navigable waters of the Sacramento river, is the county of Tehama, embracing an area of 2,800 square miles, and having a population of 3,587; of whom 2,834 are native Americans and 753 are of foreign birth. This county is more than double the size of the State of Rhode Island, and has a great variety of resources—placer mines of gold, rich agricultural lands, grazing ranges, and forests of valuable trees. Portions of the country are rugged, but there are large and beautiful valleys of most rich and productive soil, yielding grain, vegetables, and fruits of every variety. Farming is pursued with great energy and profit. The railroad connecting California and Oregon passes through this county. The climate is mild; snow sometimes falls upon the mountains, but the face of the country in winter is perpetual verdure. The grape and most of the semi-tropical fruits grow well. The rainfall is considerable in winter. During a part of summer the weather is very warm. The Sacramento river passes through the county, and is navigable to Red Bluff, the county-seat, a town of 920 inhabitants. The town of Tehama has a population of only 163, and so far there is no city of importance in the county of Tehama.

In the northern portion of the county stands Lassens peak, 10,577 feet above the sea. More than half a million pounds of wool are produced annually. The county is eminently an agricultural one.

BUTTE.—South of Tehama and bounded northwest by Tehama, northeast by Plumas, southeast by Yuba, south by Sutter, and west by Colusa, is the county of Butte, with an area of 1,458 square miles, and a population of 11,403; there being 7,428 native Americans and

3,975 persons of foreign birth. The county embraces a portion of the foot-hills and mountains of the Sierras, and a large area of the most productive agricultural lands in the State. The resources of this section are varied—mines of gold of great richness, deep forests and rich agricultural lands. The climate is delightful: upon the high mountain tops snow falls in winter, but throughout the valleys the climate is perpetual summer. Grain, fruit, and vegetables grow abundantly, and many of the semi-tropical fruits ripen to perfection. Rains fall to considerable extent in winter, but the summers are long, dry, and in some places excessively hot; but the weather altogether is charming. The lemon, fig, walnut, almond, olive, orange, and mulberry all grow well; and farming, dairying, grazing, mining, and lumbering are carried on extensively.

There are several growing towns in the county: Oroville is the county-seat; Chico, with a population of 3,718, is a prosperous and increasing town. Lines of railroad traversing the county, together with its genial climate and varied resources, make it one of the most prosperous portions of the State.

Colusa.—Bounded north by Tehama, south by Yolo, and west by Mendocino and Lake, is the county of Colusa, with an area of 2,376 square miles, and a population of 6,165; of whom 5,088 are Americans and 1,077 are of foreign birth. This county is fifty-one square miles larger than the State of Delaware, and possesses great natural resources. Salt, sulphur, and quicksilver are found in the northwestern portions of the county, but so far no mines of any importance of gold or silver have been discovered. Agriculture and grazing are the chief pursuits of the people. The Sacramento river passes through the eastern side of the county for its entire length. Colusa is eminently an agricultural county, being one of the chief wheat-growing counties in the State. Rains fall to considerable extent in winter, but snow is never seen, and the climate is protracted summer. Every variety of grain, vegetables, and fruits grow well, and many of the semi-tropical fruits attain great perfection.

There are no towns of importance in this county: Colusa, the county-seat, with a population of 1,051, and Princeton and Monroeville, are the principal ones.

YUBA.—Bounded on the north by Butte, east by Nevada and Sierra, south by Sutter and Placer, and west by Sutter and Butte, is the county of Yuba, with an area of six hundred square miles, and a population of 10,851; of whom 6,144 are native Americans and 4,707 of foreign birth. This county consists of mountains, rolling hills, forests, and beautiful valleys of unsurpassed productiveness. The climate is perpetual summer. Winter is distinguished only from the other seasons by the rainfall. Summer is long, dry, and exceedingly hot in many of the valleys and cañons. Mines of gold, of great richness, are still worked, and great quantities of fruit and grain are raised, many of the semi-tropical fruits attaining great perfection. The orange, lemon, fig, walnut, almond, mulberry, and grape all grow well. More than one-half of the castor beans grown in California are produced in this county. Considerable lumber is made, but the chief wealth of the county is its varied agricultural and mineral resources. There is one woollen factory in operation in the county.

Marysville, the county-seat and principal city, has a population of 4,375, and is connected with various parts of the State by railroad and river navigation.

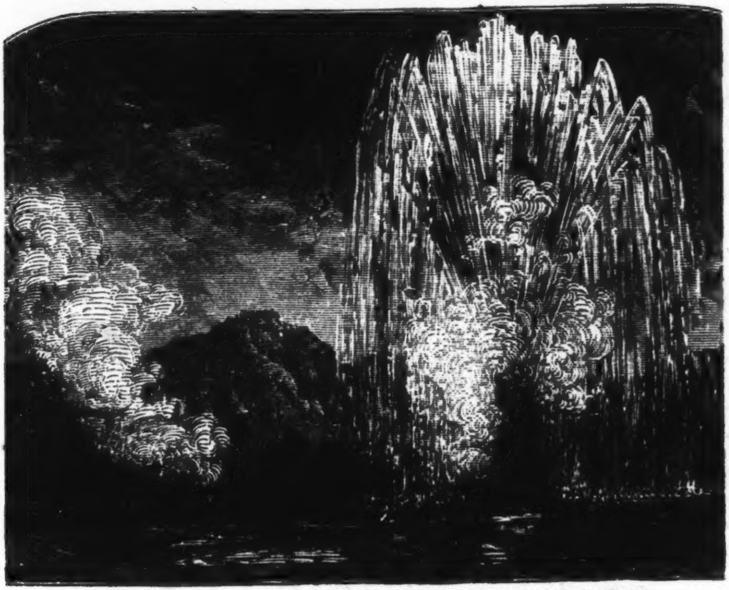
SUTTER.—In the fertile valley of the Sacramento, bounded north by Yuba and Butte, east by Yuba and Placer, south by Yolo and Sacramento, and west by Yolo and Colusa, is Sutter county, with an area of 576 square miles, and a population of 5,030; there being 3,949 native Americans and 1,081 of foreign birth. This is eminently an agricultural county. A portion of the northern section is covered with rugged hills, and large areas of the western side is *tule* land, subject to overflow in winter; but the greater portion of the county is fit for cultivation, and large quantities of grain, fruit, and vegetables are cultivated. The climate is continuous summer: rain falls to considerable extent in winter, and the summers are long, dry, and exceedingly hot. The Sacramento river passes along the western side of the county, and the Feather river through it. All the grains, and the orange, grape, lemon, fig, almond, walnut, and mulberry grow well. There are few towns of any size. Yuba City, with one thousand inhabitants, is the county-seat. Railroads intersect the county, which is altogether prosperous.

YOLO.—Lying west of the Sacramento river, and bounded north by Colusa, east by Sutter and Sacramento, south by Solano, and west by Lake and Napa, is the county of Yolo, with an area of 1,150 square miles, and a population of 9,899; of whom 7,778 are native Americans and 2,121 are of foreign birth. A portion of the northwestern side of the county is hilly, and along the streams and rolling hills oak and other trees grow; but the greater part of the surface is level, with deep rich soil, entirely free from forest, shrub, or stones: there is considerable low *tule* lands along the Sacramento river. The soil is rich, and grain, fruit, vegetables—in fact, almost any thing that grows from the soil in any part of the world—can be produced in this county. The climate is uninterrupted summer. Th rains of winter are neither cold nor excessive, and summer is delightful, although very hot in many places. Yolo is altogether an agricultural county. One and a-half million bushels of wheat are grown annually in this county, and the orange, lemon, grape, fig, and every variety of agricultural product grows most abundantly. Half the mulberry trees in the State are in Yolo, and one-third of the pea-nuts grown in California are produced in this county.

There are few towns of importance in Yolo. Woodland, a prosperous and growing place in the southern portion of the county, is the county-seat. Railroads pass through the principal valleys, and the county generally may be regarded as one of prosperity.

Lake.—Bounded north by Mendocino, northeast by Yolo and Colusa, south by Napa, and southwest by Mendocino and Sonoma, is the county of Lake, with an area of 972 square miles, and a population of 2,969; divided between 2,483 native Americans and 486 foreigners. The surface of this county is a succession of rolling hills, deep cañons, and rich valleys. The hills are well wooded; and there is an abundant supply of water and native grasses. The resources of this county are varied—lumbering, farming, and grazing. Quicksilver, sulphur, borax, and copper are obtained in

CRATER OF THE GIANT GEYSER, YELLOWSTONE REGION, WYOMING TERRITORY.
(Line of the Northern Pacific Railroad.)



THE FAN GEYSER, YELLOWSTONE REGION, WYOMING TERRITORY.
(Line of the Northern Pacific Railroad.)

BATHING POOLS, YELLOWSTONE REGION, WYOMING TERRITORY.
(Line of the Northern Pacific Railroad.)

THE GROTTO GEYSER, YELLOWSTONE REGION, WYOMING TERRITORY.
(Line of the Northern Pacific Railroad.)

considerable quantities. So far, neither gold nor silver have been found. The climate of Lake county is summer perpetually, and the general aspect of the county at all times is picturesque and charming. The weather, without being too hot, is warm and most delightful. Grazing, dairying, fruit-growing, and farming are all carried on successfully. Most of the semi-tropical fruits grow here, and the soil is very productive. The almond, walnut, fig, olive, and mulberry grow in Lake county. There are no towns of importance in the county. Lakeport, the county-seat, has a population of 297 persons. The county is generally prosperous.

NAPA.—Bounded north by Lake, northeast by Solano and Yolo, south by Solano and the Bay of San Pablo, and west by Sonoma, is Napa county, with an area of 828 square miles, and a population of 7,163; of whom 5,394 are native American and 1,769 are of foreign birth. The general features of this county are successive hills, mountains, and beautiful valleys. Forests of oak and other trees fringe the hill-sides and dot the valleys. Springs of boiling hot water, mineral, soda, and sulphur springs of great beauty and value are found. No mines of the precious metals have yet been discovered in this county; but sulphur, copper, and quicksilver are obtained. The springs of soda and the hot springs of the county are favorite places of resort for invalids and pleasure-seekers; and the soda, pure from the springs, is largely sold over the State. Napa is eminently an agricultural county; the grape, orange, fig, lemon, walnut, olive, mulberry, and almost every variety of fruit, grain, and vegetables growing most abundantly. The climate is continuous summer, and the whole surface of the county perpetual verdure. Frost is occasionally seen in January, but never sufficient to affect vegetation. Summer is dry, and in most places in the county the weather is quite warm, although never excessively hot. The waters of the Bays of San Francisco and San Pablo afford direct water communication to and from San Francisco. The chief towns in the county are Napa City, the county-seat, Calistoga, where are located the hot springs and petrified forests, St. Helena, Suscol, and Sebastopol. There are forty-six miles of railroad in the county, the permanent agricultural wealth of which is fast developing.

Solano.—Bounded north by Yolo and Napa, east by the Sacramento river, south by Suisun bay and the Straits of Carquinez, and west by Napa, is the county of Solano, with an area of 800 square miles, and a population of 16,871; of whom 11,263 are native American and 5,608 are of foreign birth. Along the northern side of the county are rolling hills, covered with oak and other timber; but the great body of the county is level and slightly rolling land of unsurpassed fertility, producing grain, fruit, vegetables, grapes, and many of the semi-tropical fruits in great abundance. No precious metals have been discovered in this county; but cement, marble, and coal are found. The county having railroads and a direct water communication with San Francisco gives it superior commercial advantages. The climate is perpetually mild; the heavy falls of rain in winter and the drought of summer alone distinguishing the seasons. Agriculture is the chief resource of the county, there being but one county in the State having a greater area of cultivation. There are almost one and a-half million grape-vines in Solano, and two million bushels of wheat grown annually. Two-thirds of all the flax grown in California is grown in this county.

Vallejo, where the United States navy-yard is situated, is the chief city of the county, and is growing fast: its population is 6,392. The other chief towns in this county are Benicia, with a population of 1,660, Rio Vista, Suisun, Vacaville, and Fairfield, the county-seat.

There are but three counties in the State surpassing Solano in the production of wheat. The country is fast filling up with industrious and prosperous farmers.

SACRAMENTO.—Bounded north by Placer and Sutter, east by El Dorado and Amador, south by Contra Costa and San Joaquin, and west by the Sacramento river, is Sacramento county, with an area of 1,026 square miles, and a population of 26,830, divided between 16,228 native Americans and 10,602 foreigners. The county has a diversity of soil and resources. Upon its eastern side are spurs and ridges of the foot-hills of the Sierras, well timbered with oak and other trees. This region, once the busy scene of mining, is now covered with the grape-vine, orchards, and farms. There are large areas of valley lands, and toward the Sacramento and San Joaquin rivers almost one-third of the area of the county is low, rich soil, subject to overflow in spring: this land is unsurpassed for its productiveness; vegetables, grain, and fruit of almost every variety grow to perfection. Toward the foot-hills, gold-mining had been carried on to considerable extent some years ago, but, with the exception of some placer mines worked by Chinamen, no mines of any importance are now worked. The climate of this county is delightfully mild. Along the foot-hills there are slight falls of snow in winter, but throughout the valleys snow is never seen. Rain falls freely in winter, and the valleys in summer are excessively hot and dry, grass being crisped by the heat of the sun and the dry, hot winds. The Sacramento river and various railroads afford abundant means of travel to and through the county.

Extensive and varied agriculture and manufacturing industries add to the increasing prosperity of the county, which has the second largest population of any county in the State.

This county is famous in history as the home of General Sutter, and Sutter's Fort, a short distance from the city of Sacramento, is a place ever green in the memory of the early gold-hunter.

Sacramento City, the capital of the State, is built upon low ground, on the south side of the Sacramento river. It has been subject to overflow, and is surrounded by a levee or earth embankment, and is supposed to be secure from the effects of floods. The city is spread over a large area of almost water-level plain, built with substantial brick and wood houses. The capitol building, State agricultural building, and other edifices adorn the city, and add much to its attractions. Beautiful gardens and shade-trees ornament and beautify the capital city, giving it a green and pleasant appearance. Railroad machine-shops, a woollen factory, and various other branches of industry give employment to large numbers of the people. Trains of cars and lines of steamboats run daily between San Francisco and Sacramento. The population of the city of Sacramento is 16,298, being the second largest city in the State. Folsom is the only town of any importance outside of Sacramento in the county, but there are several small growing places, and altogether the county is prosperous.

Agriculture is the chief resource of the county, and the grape, orange, lemon, fig, olive, apple, peach, pear, and all the products of the farm grow abundantly. Onions, melons, pea-nuts, sweet potatoes, and hops are grown to a larger extent in this county than in any other in the State. More than one-half of the sweet potatoes grown in California annually are produced in Sacramento county.

CONTRA COSTA.—In an easterly direction across the bay from San Francisco is the county of Contra Costa. It is bounded north by the Straits of Carquinez, Suisun bay, and the River San Joaquin, east by San Joaquin county, south and southwest by Alameda, and west by the Bay of San Francisco. The area of this county is 756 square miles, and the population is 8,461 ; of whom 5,791 are native Americans and 2,670 are of foreign birth. Contra Costa is bounded upon three sides by water, and is called a "bay county," from the fact that it faces upon the Bay of San Francisco. The surface of the county is rolling hills and rugged mountains, with beautiful fertile valleys, and even the high rolling hills have a deep rich soil, and are covered with wild oats and native grasses down to the waters of the bay. There is little timber, the general face of the country being free from tree or shrub. Agriculture, grazing, and coal-mining are the chief branches of industry.

Monte Diablo, a high chain of mountains, is a prominent object, and quite visible from the city of San Francisco. It is directly east of the Golden Gate and San

Francisco. In winter snow falls upon this range, but is of short duration, lasting a few days only, during which time it is an object of curiosity to the people of San Francisco and surrounding country. In this high mountain range are inexhaustible beds of coal, producing one hundred and fifty thousand tons annually. This is the only county in the State in which coal-mining is successfully prosecuted.

Copper, quicksilver, and other minerals are found in Contra Costa, but are not yet developed; gold nor silver has not been discovered in this county. Grain, vegetables, and fruit grow well. The damp and fogs from the bay keep the western side of the county cool during summer; but, while these influences preserve the pasturage green, they are a source of annoyance to farmers by blighting wheat with rust: indeed, all the portions of each county facing the salt water of the Bay of San Francisco are subject to rust in the wheat, while a little distance from these sections rust is unknown.

The climate is exceedingly mild, winter being known only by its rains. Summer is delightful, the air being rendered cool and bracing by the winds sweeping through the Golden Gate, and across the bay, and passing over the greater portion of the county.

Martinez, situated near the Straits of Carquinez, is the county-seat. Antioch, Alamo, Pacheco, and San Pablo are the chief towns in the county, but are all small. Nearly all the semi-tropical fruits grow well in Contra Costa county, which is eminently an agricultural district.

ALAMEDA.—Directly east from San Francisco, and eight miles across the bay, bounded north by Contra

Costa, east by San Joaquin, south by Santa Clara, and west by the Bay of San Francisco, is Alameda county, with an area of 800 square miles, and a population of 24,237; of whom 14,382 are native Americans and 9,855 are of foreign birth. The surface is a succession of beautiful valleys and rolling hills, with deep rich soil, covered with wild oats and native grasses. There are some rugged hills, and the range of Monte Diablo runs through the county. Upon a few flats along the bay, and some of the hills, and in the gulches, grow oak and other trees; but the general face of the country for miles is entirely free from trees, shrubs, or stones, and is fit for the plow. The soil is unsurpassed in its productiveness. Grain, fruit, and vegetables grow most luxuriantly, and great quantities of berries, cherries, and fruit of every description are sent from this county to the San Francisco market. The mulberry and most of the semi-tropical fruits grow. The resources of the county are agriculture, fruit-growing, grazing, and dairying. The climate is perpetual summer. Snow never falls, and the prevailing winds from the ocean and the Bay of San Francisco so temper the climate that, in the western side of the county, the heat is never great. Coal has been discovered in some parts of the county, but none of the precious nor other metals have been found. Hot springs and many objects of natural beauty exist in the county. Steamers run every hour from San Francisco to Alameda, a town containing 1,557 inhabitants.

San Leandro, a beautifully situated town in the heart of a rich agricultural valley, is the county-seat. Brooklyn, Alameda, Alvarado, Centreville, and Haywood are all growing towns in this county. At Alvarado, a beet-sugar mill, producing excellent sugar from beets raised in the valley, is in successful operation. Oakland, directly east and across the bay from the city of San Francisco, is the principal city in the county, having a population of 11,164. It is the third city in size in the State. The city of Oakland is built upon a level piece of sandy land, beautifully ornamented with evergreens, oaks and other native forest trees, which break the strong west winds sweeping across the bay; and in summer, when the cold fogs and winds of San Francisco are chilling and oppressive, it is warm, calm, and delightful at Oakland. The great overland railroad passes through the city, and out upon a wharf of three miles in length, toward Goat island and San Francisco, where connection is made by ferry-boats. Oakland is the home of thousands of persons engaged in business in San Francisco. There are numerous educational institutions in the city and vicinity. The State university is located at Berkeley, five miles out of town. The view from Alameda county is charming: the city of San Francisco, with its hills and lofty church spires, the beautiful Bay of San Francisco, its islands, the mountains of Marin county, and the Golden Gate, are all in full view; and with the sun sinking into the bosom of the ocean, and gilding the landscape and bay, the scene is most lovely.

San Joaquin.—The county of San Joaquin is situated in the fertile valley of that name, which embraces nine million acres of the most fertile and tillable land in California. The county is bounded north by Sacramento, east by Calaveras, Amador, and Stanislaus, and west by Contra Costa and Alameda. The area of the county is 1,350 square miles—44 square miles greater than the State of Rhode Island—and contains a population of 21,050; of whom 14,824 are native Americans and 6,226 are of foreign birth.

The county is almost level. Scattered oaks and other trees of beauty dot the plains, lending a most picturesque and beautiful aspect. Large areas are subject to overflow in winter; but these lands are of the richest character, and, when surrounded by levees, produce vegetables, grain, and fruit beyond comparison. The climate is mild and even. Rains fall to considerable extent in winter, and the summers are excessively dry and hot. Grazing and a diversified agriculture are the chief resources of the county. No minerals, so far, have been discovered. The overland railroad passes through the county, and steamers run from San Francisco to Stockton and other points. More than one and a-half million bushels of wheat are produced annually in this county, which is in the heart of the wheat-growing region of the State. The lemon, fig, walnut, almond, mulberry, olive, and orange grow.

Mokelumne, Farmington, and Woodbridge are growing towns. Stockton, the county-seat and principal city in the county, has a population of 10,033, and is at the head of river navigation on the San Joaquin river: boats of light draught, however, ascend farther. Stockton is a nicely built city and is growing rapidly; at this place is situated the State insane asylum. The city is built upon a low plain; it is very dusty and exceedingly hot in summer, but well shaded with beautiful trees.

STANISLAUS.—Bounded north by San Joaquin county, northeast by Tuolumne and Calaveras, southeast by

Merced, and west by Santa Clara, is the county of Stanislaus, with an area of 1,350 square miles—44 square miles more than is comprised within the area of the State of Rhode Island—and a population of 6,499; of whom 5,147 are native and 1,352 are of foreign birth. The body of the county is situated between the foot-hills of the Sierras and the Monte Diablo range of mountains, and is one of the most fertile sections of the State, and produces one-third more wheat than any other county in California. Along the foot-hills, in the eastern section of the county, placer gold-mines have been worked to considerable extent, and copper has been discovered; but the county is eminently an agricultural one. The surface is generally level, there being but little timber, save along the edges of the streams and upon the hill-tops. The San Joaquin and other rivers flow through the county. Grain, vegetables, and fruits of every description grow abundantly; and over the level and fertile plains, as far as the eye can reach, can be seen miles upon miles of waving fields of wheat, unbroken by a single tree, fence, or shrub, and in the whole county not an interruption of rock or tree obstructs the plow. The climate is protracted summer. The rains of winter mantle the whole surface in green. Summer is dry and hot; but, as the evenings and nights of summer are cool throughout the whole State, the weather, however hot during the day, is never oppressive. Stanislaus produces every variety of fruit, grain, and vegetables, and most of the semi-tropical fruits grow well; and one and a-quarter million pounds of wool and three and a-quarter million bushels of wheat are produced annually. There are no towns of any importance. Knight's Ferry, the county-seat, with a population of 850, is the only place of importance.

SANTA CLARA.—In a southerly direction from San Francisco, and separated from it by San Mateo county, is the county of Santa Clara, lying between the Monte Diablo mountains on the east and the Santa Cruz mountains on the west, and bounded north by Alameda and the head of the Bay of San Francisco, east by Merced and Stanislaus, south by Monterey, and west by Santa Cruz county. The area of this county is 1,332 square miles—26 square miles larger than the State of Rhode Island. The population of the county is 26,246—the third largest of any county in the State—made up of 17,241 native Americans and 9,005 foreigners. The surface of the county is a succession of delightful valleys, rolling hills, and wooded mountains. Upon many of the valleys, beautiful oak and other trees grow. The soil is deep, rich, and fertile, producing grain, fruit, berries, and vegetables in great abundance. In most places the surface is entirely free from trees, shrubs, or rock to interrupt the plow. The climate is charming; snow never falls, and winter is a succession of mild showers and sunshine. Spring (January) presents waving fields of grain, verdant hills clad in wild oats and wild flowers, and vast orchards blooming and fragrant. Just enough of the ocean breezes of summer pass over the Coast Range of mountains to temper the heat of summer to the most balmy and delightful temperature, without making it either too hot or too cool.

Agriculture in great diversity, grazing, and stock-raising are the chief resources of the county. No mines of precious metals have yet been discovered, but the famous New Almaden and other quicksilver mines of great richness are in this county.

This is one of the greatest agricultural counties in California, and supplies the San Francisco market with great abundance of fruits and berries. One-third of all the apple trees in the State are in this county. Peaches, apples, pears, cherries, grapes, and other fruits are produced in great quantities. There are over three million strawberry vines, producing one and a-half million pounds of strawberries annually; there being but one million pounds grown in all the rest of the State. Monterey and Santa Clara counties produce one-third of all the cheese of the State; the latter county making one and three-quarters of a million pounds annually. The olive, orange, grape, lemon, fig, and most of the semi-tropical fruits grow abundantly, and the county yields two million bushels of wheat annually.

Manufacturing and mechanical industry is carried on to considerable extent. At San José and Los Gatos are established large woollen factories. The county is reached from San Francisco by daily trains and by steamboats upon the bay.

There are several growing towns in the county. The county-seat, San José, is built upon the rich soil of the valley, eight miles inland from Alviso, the head of navigation on the Bay of San Francisco. It contains a population of 9,091. The city is well built, having many elegant dwellings. The soil in the vicinity is rich, producing abundantly. Beautiful ornamental and fruit trees and the numerous flower-gardens lend a charming aspect to the place, and make it one of the most beautiful cities in the world. The State Normal school and other educational institutions are located here. The next town of importance in the county is Santa Clara, three miles northwest from San José. This town was founded as a mission in 1774. It has a population of 3,470. The place is celebrated for its educational institutions, the College of Santa Clara and the University of the Pacific being located here. Gilroy, Alviso, and Saratoga are also growing towns in this county, from which railroads are projected to all parts of the southern section of the State, and to the Atlantic States.

MERCED.—Lying between the foot-hills of the Sierra Nevada and Monte Diablo, in the heart of the San Joaquin valley, and with the San Joaquin, Merced, and other rivers passing through it, is the county of Merced, embracing an area of 1,975 square miles, and having a population of but 2,807; of whom 2,196 are native and 611 are of foreign birth. A considerable portion of the county is subject to overflow, but is easily reclaimed, and almost every foot of the county is of the very best description of agricultural land, which will produce grain, vegetables, and fruits of every description most abundantly. The county is bounded northwest by Stanislaus, northeast by Mariposa, southeast by Fresno, and southwest by Santa Clara and Monterey. The surface of the country is generally level. Oak and other trees grow about the streams and on the mountains, but the body of the county is for miles entirely free from any obstruction to the plow. The soil is easily cultivated, and is rich beyond comparison. No mines have yet been discovered. The resources of the county are agriculture and grazing. All the semi-tropical fruits grow well. The climate is unbroken by the presence of frost or snow. Winter, with warm rains, is a season of verdure. December ushers in waving fields of grain, and rich meadows gayly bedecked with flowers through the months of January, February, and March, with ripe fields of grain in June and July, give a continuous season of summer. The progress already made by the sparse population of this county is remarkable.

There are no towns of importance in this county. Snellings, the county-seat, Dover, Hopeton, and Merced Falls are the only places of any importance. At the latter town is situated the woollen factory of the Merced Falls Woollen Manufacturing Company.

FRESNO.—Extending from the crest of the Monte Diablo or Coast Range of mountains to the summit of the Sierras, in the midst of the San Joaquin valley, and embracing an area of 8,750 square miles, and having a population of 6,336; of whom 4,974 are native Americans and 1,362 are of foreign birth, is the county of Fresno. This county would make six States the size of the State of Rhode Island, and have 884 square miles to spare. The eastern end of the county, in the Sierras, is rugged and mountainous in the extreme. Here the grandest forest giants in the world grow. The mountains and rolling hills are generally well wooded, and mines of gold and other metals are found in this section. Extending westward, the body of the county lies in the San Joaquin valley. The San Joaquin river passes through the centre of the county, and is navigable to Fresno City. Other rivers of considerable magnitude pass through this county, the great body of which is perfectly level, having a deep rich soil, entirely free from forest or other obstructions. Toward the west, where the county joins Monte Diablo, the surface is rolling and rugged. Here the quicksilver mines of New Idria are located.

The climate in this county is varied. In winter considerable snow falls in that portion in the Sierras, but throughout the great valley the whole surface is enveloped in green during the entire winter, affording pasturage to the vast herds of cattle and flocks of sheep in this county. Summer in the valley is hot, but in the mountains it is delightful; and in the hottest and dryest of summer, cattle are driven from the valleys into the Sierras, where they graze upon the luxuriant native grass and herbage, green during the hottest weather. In the valley regions it is perpetual summer, and most of the semi-tropical fruits grow well.

Stock-raising is the chief business of the county, but farming is carried on to considerable extent; and the soil is rich and well adapted to every branch of agriculture and fruit-raising. There are a hundred thousand cattle and a hundred and fifty thousand sheep in this county, and more than a-half million pounds of wool grown annually. This section has a charming climate and varied natural resources, which are being fast developed by lines of railroad building through its rich valleys.

No towns of importance have yet grown in this section. Millerton, the county-seat, Fresno City, and Kingston are the only places of any size.

TULARE.—Bounded on the north and northeast by Fresno, east by Inyo, south by Kern, and west by Monterey, and extending from the Monte Diablo range to the Sierras, occupying a great portion of the fertile Tulare valley, is Tulare county, embracing an area of 5,600 square miles—600 of which are embraced in Tulare lake, the largest lake in the State. Several rivers of magnitude pour down from the west slope of the Sierras, and are lost in the depths of the inland sea of Tulare lake. The population of the county is 4,533; of whom 3,977 are Americans and 556 are of foreign birth. The surface of the county is rugged and mountainous in the extreme in the eastern end, which embraces a portion of the Sierra Nevada mountains, and is also rugged and hilly on the western end, embracing a portion of Monte Diablo. These sections are well wooded; and throughout the broad, rich valley of the centre of the county, oak and other trees occasionally dot the surface or grow by the river side.

This county is almost as large as the States of Connecticut and Delaware, and would make four States as large as the State of Rhode Island, leaving an area of 476 square miles. Winter, even in the Sierra range, is not severe in this county; and although considerable snow falls it is of short duration, and cattle and horses graze at large through this section the entire year. In the valleys it is continuous summer. December, January, and February present a beautiful scene of verdure. Grain, vegetables, and fruits of almost every description grow abundantly. Winter in the valleys is made up of mild rains and sunshine. Summer is very dry and hot. The agricultural capacity of the county is unsurpassed; but stock-raising is the chief interest of Tulare, which is third in the State in the number of its cattle. The grape, lemon, fig, walnut, almond, mulberry, olive, and orange all grow well. Mines of gold and other minerals are found in the county in the western slope of the Sierra range, but are little developed.

Visalia, a flourishing town of 762 inhabitants, is the county-seat. There are no other towns of any magnitude in the county. Vandalia and Porterville are small villages.

KERN.—Bounded on the north by Tulare, east by San Bernardino, south by Los Angeles, and west and southwest by San Luis Obispo, is the county of Kern, extending from the Monte Diablo range in the west to the Sierra Nevada in the east, and occupying the southern extreme end of the great fertile valleys of the San Joaquin and Tulare. The surface of the country is diversified with mountains, plains, valleys, and lakes. It is well watered, and forests grow upon the rolling hills and mountains and trees along the streams; but the valleys for miles upon miles are an unbroken field of native grasses and wild flowers, affording the finest pasture-range in the State. The soil is most productive, yielding grain, vegetables, and fruits of every description. As many as *eight full-grown crops of hay* have been cut upon the same piece of ground in a single year in parts of this county. The climate is uninterrupted summer. In January and February snow falls lightly upon the Sierra range, but soon disappears. Fall, winter, and spring in the valleys are continuous seasons of verdure. Winter is interspersed with warm showers of rain, balmy atmosphere, and sunshine. The lemon, fig, grape, almond, walnut, mulberry, olive, and orange all grow well. Mines of gold, silver, and other metals are found in the eastern section of the county along the range of the Sierra Nevada mountains, some of which are worked with profit; but agriculture and grazing are the chief resources of this section, and are carried on successfully. Kern embraces an area of 8,000 square miles—equal to the combined area of the Papal States and the Grand Duchy of Hesse-Darmstadt, and within a fraction of the combined area of the States of Connecticut, Delaware, and Rhode Island, and would make *seven* States of the size of the latter State. The population of Kern is but 2,925; there being 2,157 native Americans and 768 foreigners. Heretofore the county has been almost inaccessible for want of means of transportation; but railroads now building will develop the resources of the county.

There are no towns of any importance in this section. Havilah, the county-seat, has a population of 439. Bakersville and Kernville are small but growing villages.

Considerable numbers of the cattle and sheep grazing in this and Tulare county are owned in other sections of the State, and are only herded there because pasturage is abundant.

SAN BERNARDINO.—Occupying the extreme southeastern part of the State, and running to within twenty miles of the ocean on the west, and to the extreme eastern line of the State, being in a direct line from Los Angeles county to the Colorado river, a distance of 220 miles, and, from the Colorado river to its northern boundary, 225 miles, and containing an area of 23,472 square miles, and a population of 3,988, of whom 3,328 are American and 660 are foreigners, is the county of San Bernardino, the largest county in California.

The vast area of this county presents a great diversity of climate, soil, and resources—rich valleys, rolling hills, high mountains, sandy deserts, alkaline and dry lakes, hot and sulphur springs. The extent of this county may be understood when it is considered that it is more than four times as great as the Kingdom of Saxony, almost double the size of the Kingdom of Holland with Luxemburg, and would make three States as large as the State of Massachusetts, leaving seventy-two square miles, and would make *eighteen States* the size of the State of Rhode Island.

The boundaries of this county are: northwest, Inyo; northeast, the State of Nevada; east, the Colorado river, separating it from Arizona; south, San Diego; and west, Los Angeles and Kern counties.

Adjoining the county of Los Angeles, and in the vicinity of the Monte Diablo range or San Bernardino mountains, is a section of beautiful country, somewhat wooded upon the hills, and well watered. Here the soil is rich and most productive, and the climate charming. In this section are the chief settlements in the county, and the county-seat, San Bernardino, with a population of 3,060 inhabitants, leaving but 928 in all the remainder of the county. In this region are the Temescal mountains, in which are rich and extensive tin-mines. A short distance east of the San Bernardino mountains, in this section, at Holcomb and Bear valleys, are rich mines of gold in quartz and placer Gold, silver, lead, copper, and other minerals are found in many parts of the county, and recent discoveries of silver and lead near the eastern line, and the Colorado river, show that the mineral resources of the county are very great. There has been but little mining yet done in this section.

Throughout the western portion of the county there are many fertile valleys, several high mountains, and some springs and lakes; but toward the central, southern, and eastern parts of the county are vast sand deserts, as far as the eye can reach without a green shrub, tree, or hill to break the monotony. No vegetable nor animal life is found in these wastes, except once in a while a few tufts of bunch grass; even the *horned toad* cannot find food for sustenance in these regions. Here the dreaded *sand-storms* sometimes overtake the forlorn traveller, and the dreariness of the dry lakes and the solitude of *Death valley* strike awe to the heart of the "prospecter," and the enchanting illusions of the *mirage* draw his feet toward fancied scenes of pleasure and hope, only to be confounded and wrecked upon the burning sands of the desert.

The Sierra Nevada mountains, so formidable in the northern end of the State, are broken and thrown about in fragments in this section; so that, in San Bernardino county, they are entirely lost: so, too, the great valleys of San Joaquin and Tulare are broken up before they reach this county, which, in its physical character, is entirely different from any other section of the State.

The climate of the county is summer perpetually. Throughout the northern and western part of the county rains fall through the months of what is winter at the East, although not to any extent; but toward the southeastern end, adjoining Arizona, no rain falls in winter, and a few showers in July and August, making about three inches of rain, is all the rain that falls during the whole year. The heat of summer in this quarter is very great.

Railroads projected to run through the San Joaquin valley, and also from San Diego, will pass through this county; and at a point near Fort Mohave, where the States of California and Nevada and the Territory of Arizona join, will cross the river Colorado, and connect with roads through Arizona, New Mexico, and the Atlantic seaboard. These roads will develop the resources and wonders of this county.

All the semi-tropical and most of the tropical fruits will grow in this section. The lemon, fig, mulberry, almond, walnut, olive, and orange are all cultivated successfully; and notwithstanding the broad, dry lakes, ashy and volcanic beds, and sandy deserts, there are vast areas of fertile and most productive land still uninhabited.

## CHAPTER XXX.

Mountain counties—Area, resources, climate, and population—Inyo—Mono—Mariposa—Tuolumne—Calaveras—Amador—Alpine—El Dorado—Placer—Nevada—Sierra—Plumas—Lassen.

TURNING northward from the Colorado river and the deserts of San Bernardino county, and following the ridge of the Sierra Nevada mountains to the Oregon State line, is found that range of counties embracing the greater part of the Sierras, with their wonderful forest giants, lofty mountains, and magnificent waterfalls; here, too, are the great treasure vaults of the Golden State, with representatives of every race and kindred of man bowing to and knocking at their doors. This chain of counties is known as the

### MOUNTAIN COUNTIES.

Some years ago, when the placer mines of some of these counties became exhausted, the miners abandoned them and sought the valley counties as a place of permanent abode. Within a more recent period, the great capacity of these mountain regions for producing grain, vegetables, and fruit has been ascertained: particularly have they become celebrated for grape-growing, and for producing the finest wines in California. Nearly every variety of fruit, including the orange, olive, lemon, and fig, grow in most of these counties, and orchards, vines, and gardens now bloom upon the ruins of the early miner's temporary home along the foot-hills and gulches of the western slope of the Sierras. For diversified agriculture and the far-

FIRST GLIMPSE OF THE SIERRAS.

mer's home, these mountain counties, generally well wooded, with pure water and pure air, are much preferable to the low and flat valley regions; and, although it is but a very few years since any attention was first paid to agriculture in this section, the material progress made is most encouraging.

Inyo.—The county of Inyo, the most southern of the mountain counties, is bounded north by Mono, northeast by the State of Nevada, southeast by San Bernardino, and west by Fresno and Tulare. The area of this county is 4,680 square miles—equal to the area of the State of Connecticut, and would make three States of the size of the State of Rhode Island, leaving 768 square miles. The whole of this county lies east of the Sierra Nevada mountains. The surface is rugged, and interspersed with elevated mountains, lakes, valleys, and forests. The loftiest mountains in the State are in this county. The climate is mild: snow falls upon the mountain ranges in winter, but it is never very cold, and throughout the whole year sheep, cattle, and horses graze upon the hillsides and valleys. There is but little rainfall, and the summers are generally very warm. In the region about Owens lake and Owens river there is a considerable area of the most fertile land in California, and many small valleys of great richness throughout the county, many of which are cultivated with great profit. There are some forest trees upon the mountains and hill-sides, but a large area of the eastern portion of the county is destitute of trees, and is but a sandy desert. Springs of salt, sulphur, alkaline, soda, and poison are found; and mines of gold, silver, tin, lead, and copper, of great richness, exist. Lead is extensively mined, and veins of quartz, rich in free gold, are worked with great profit. The remoteness of the county has, so far, much retarded its development. Mining, grazing, and agriculture are the chief resources of this section. Grain, vegetables, and fruit, including grapes, oranges, lemons, figs, and olives, grow, and the mulberry thrives well.

The whole population of the county is but 1,956; of whom 1,104 are native Americans and 792 are of foreign birth. Independence, the county-seat, has a population of 400. Cerro Gordo, Bend City, Kearsarge, Lone Pine, and Lake City are small towns in the county. It was in this county, in the vicinity of Lone Pine, that the severest earthquake ever experienced in the United States occurred, in March, 1872, as described in a preceding chapter.

MONO.—The next county northward is Mono. Like Inyo, it lies entirely east of the Sierras, and these two counties are the only ones in the State east of that chain of mountains. Mono runs along the Sierras for a distance of 170 miles, and is about 40 miles in width, but growing narrow toward its northern end. The area of this county is 4,176 square miles—double the size of the State of Delaware, and more than three times as large as the State of Rhode Island. It has the smallest population of any county in the State—430; of whom 305 are native Americans and 125 are of foreign birth.

The remoteness of this section from markets and the lack of means of transportation, more than the want of natural resources, have retarded the progress of this county. The surface of Mono is rugged and generally well wooded, particularly upon its western side. Owens and other rivers have their fountain-heads in this county. Mountains of considerable altitude and lakes of wonderful fluids exist. Toward the eastern side of the county there are wide areas unfit for tillage, but there are also many beautiful and fertile valleys susceptible of high cultivation; and grain, vegetables, and fruit grow well. None of the semi-tropical fruits nor the grape have yet been cultivated. Agriculture and mining are the chief resources of the county. Farming and grazing are profitably conducted, and mines of gold, silver, and other minerals are found, but are yet very little developed. The climate is cold in winter, considerable snow falling upon the mountains, but in the valleys it is mild, and cattle graze upon the native grasses throughout the whole year. Summer is long, dry, and hot, but most agreeable.

Benton and Bridgeport are the only towns of any importance in the county; the latter town, situated near the Sierras, in the Big Meadows, is the county-seat.

MARIPOSA.—This county lies directly west of Mono lake and upon the western slope of the Sierra Nevada mountains, and is almost directly east from the city of San Francisco. It is bounded north by Tuolumne, east by Mono, south by Fresno, and west by Merced; and has an area of 1,440 square miles and a population of 4,572; of whom 2,192 only are Americans, while 2,380 are of foreign birth. The surface of the country is diversified with mountains, rolling hills, dense forests, beautiful valleys, dashing streams, and delightful water-falls. Here are the celebrated *Big Trees* and the famed *Yosemite Valley and Falls.* In that portion of the county in the Sierras snow falls to considerable depth in winter, but along the western side snow is rarely seen, and cattle and sheep graze the year round upon the native grasses. Summer in the Sierras is delightful, the forests, foliage, and grass being green, while in the valleys below all is parched with heat. A great portion of the county is suited to grazing and farming, and each year these pursuits are receiving more attention. Fruit-growing is conducted upon a large scale, and with profit. The fig, olive, grape, mulberry, almond, and orange grow, but not so well as in counties farther south. Mariposa possesses great mineral wealth, and veins of quartz rich in gold have been and are still worked with great profit. This is the most southern county of the chain of early mining counties extending northward from this point. The principal towns in the county are Bear Valley, Coulterville, Hornitos, and Mariposa, the county-seat.

TUOLUMNE.—North of Mariposa, and extending from the crest of the Sierras to the San Joaquin valley in the west, a distance of 70 miles, is the county of Tuolumne, with an area of 1,944 square miles, and a population of 8,150; of whom 4,182 are native American and 3,968 are of foreign birth. The county is bounded northwest by Calaveras, north by Alpine, east by Mono, south by Mariposa, and southwest by Stanislaus.

This county is famous in the early history of California for its rich placer mines, and still produces largely of the precious metals; but, like many of the mining counties, the placers are much exhausted, and quartz-mining has taken the place of the crevice-knife, pan, and shovel of the past. The county, once almost depopulated upon the failure of the gold placers, is now fast developing its inexhaustible resources in producing grain, vegetables, and fruit; and now, in its new prosperity, the vast canals, ditches, and flumes built and abandoned by the early miner, carry water to blooming gardens, orchards, vineyards, and waving fields of wheat and corn.

The surface of the county is rugged, and throughout its eastern end is covered with vast forests of oak, pine, and other valuable timber, some of which grow to great size. The county is well watered with numerous dashing streams, fed by the snows of the Sierras. Throughout this section there are innumerable beautiful and fertile valleys; and the foot-hills and rolling, gravelly ridges, heretofore supposed to be worthless, are the finest grape-lands in the State, producing a rich, sweet grape, from which the choicest wines are produced. Apples, grapes, peaches, and the lemon, almond, walnut, mulberry, fig, and orange grow in the western slope of the county.

The climate of this section is charming. Snow falls in the Sierra Nevada mountains to considerable depth, and winter is cold, but this is only confined to the mountains. In the valleys and lower foot-hills snow never falls; and in these sections it is perpetual summer. In the mountains, in summer, the foliage is charming; and the wide ranges of native grasses, green throughout the whole summer, while the valleys below are parched with heat, afford excellent pasturage and a cool and delightful retreat from the heat of summer in the low valley counties. Rain falls to considerable extent in the western part of the county in winter; but, like all the rest of the State, no rain falls from April until November.

The principal towns in the county are Sonora, the county-seat, with a population of 2,498, and Columbia, with a population of 2,200. Chinese Camp, Big Oak Flat, and Springfield are towns of some importance.

CALAVERAS.—Northwest of Tuolumne county is the county of Calaveras, with an area of 936 square miles, and a population of 8,895; consisting of 4,677 native Americans and 4,218 foreigners. It is bounded northwest by Amador, east and southeast by Alpine and Tuolumne, (Alpine lying between it and the crest of the Sierras,) and southeast by Stanislaus and San Joaquin. The surface of the country is rugged, with abrupt mountains, deep cañons, and rolling hills. In the eastern section there are vast forests, and here are the famous "*Big Trees of Calaveras*," numbered by hundreds, some of which are hundreds of feet in height and more than *thirty feet in diameter*. The western slope of the county has many beautiful and fertile valleys which are cultivated successfully, and the rolling hills produce abundantly of superior grapes. Fruit of almost every variety grows, including the orange, fig, and lemon; but these do not thrive so well as in the more southern section of the State. Calaveras is well watered by several rivers of magnitude.

But a few years ago, this section was regarded as a purely mining region; and, upon the decay of the placer gold-mines, people left the county in great numbers and disgust. Should the miner of "'49–50" now return, he would find wheat-fields, orchards, vineyards, and gardens growing upon the hills and in the gulches abandoned as worthless years ago, sheep and cattle grazing upon the hills, and the school-house standing upon the ruins of his once lonely bachelor cabin.

Surface-mining is pretty well exhausted in Calaveras county, but mining in quartz, bank, and river is still carried on to considerable extent. At this period, the resources of the county are mining, agriculture, and stock-raising.

The climate is delightful: in the eastern end of the county snow falls in winter, but cold is never intense; throughout the southern and western sections a little snow falls upon the hills, but in the valleys it is continuous summer. Considerable rain falls in what is called winter, and the summers are long, dry, and excessively hot in some places.

There are several towns of importance in the county: Angel's Camp, Mokelumne Hill, Campo Seco, Copperopolis, and San Andreas, the county-seat, are the chief ones.

AMADOR.—Lying directly north of Calaveras, and occupying the foot-hills of the Sierras, is the county of Amador; bounded north by El Dorado, east by Alpine, south by Calaveras, and west by Sacramento and San Joaquin, and with an area of 700 square miles, and a population of 9,582; of whom 5,449 are native American and 4,133 of foreign birth.

Portions of this county, toward the east, are well timbered, and the country generally is well watered. The surface is rugged, but toward the western end of the county there are many rich valleys and a large area of agricultural lands unsurpassed in the production of the grape and fruits of almost every description; and, although a portion of the county is well up in the snow line of the Sierras, the orange, fig, lemon, and mulberry grow well. A few years since the county was regarded as worthless for agricultural purposes, and was to a great extent abandoned by the miners on the exhaustion of the placer-mines; but now the character of the soil is more fully understood, and orchards, vineyards, and dairies stand upon the hill-sides and in the gulches abandoned by the early gold-hunter, and the ditches and flumes so long forsaken are again musical with their crystal streams, nourishing and invigorating orchards and vines by the side of the quartz-mill and the deserted camp of the departed miner. Mines of great richness were formerly worked in this county, but at present the gold yield is chiefly from quartz-ledges, many of which are worked with great profit.

The climate of Amador is varied. In the high mountains snow falls to considerable depth, and during winter the weather is cold, but the snow is of short duration, and toward the western section of the county it is perpetual summer; true, the snow from the Sierras send down a thin fringe, but it is soon dissolved. Cattle, sheep, and horses graze at large during the whole year. The heat of summer is great in some places, but toward the Sierras the foliage, forests, and grass are green, and the air balmy and delightful.

There are several towns in this county; the most prominent of which are Jackson, the county-seat, with a population of 2,411, Fiddletown, Drytown, Ione, Sutter Creek, and Volcano.

Alpine.—Directly east of Amador, and with the crest of the Sierras in its centre—one-half of the county being east of this range—is the county of Al-

GIANT'S GAP, SIERRA NEVADA MOUNTAINS.
(208 miles from San Francisco.)

AMERICAN RIVER, SIERRA NEVADA MOUNTAINS.
(209 miles from San Francisco—Altitude 3,884 feet.)

pine. It is bounded north and northwest by El Dorado, east by the State of Nevada, south by Tuolumne, and west by Calaveras, Amador, and a part of El Dorado. The surface of this country is very rugged, many peaks of the Sierras standing more than ten thousand feet above the sea. A great portion of the county is densely timbered with forests of great beauty and value. Several rapid streams course down the mountain sides, affording abundant motive power. Throughout the county there are many small valleys of great fertility, and the various branches of agriculture and grazing are carried on to considerable extent. Mines of gold, silver, copper, and other minerals are found, and quartz-mining is carried on very profitably. As a grazing country it is excellent. Cattle and sheep graze at large throughout the whole winter, and during summer, when the lower counties are parched, the native grasses and herbage are green, and the climate charming, being neither too hot nor too cool. Winter is cold, stormy, and boisterous, snow falling to a great depth upon the high mountains, but frost is not so intense as in portions of the State of Virginia, and the real cold weather is but of short duration.

The area of Alpine is 850 square miles, and its population but 685; of whom 485 are native Americans and 200 are of foreign birth. The hardier varieties of fruit all grow well, but the semi-tropical fruits, so abundantly produced in many of the counties of the State, do not grow here. Monitor, Markleeville, and Silver Mountain, the county-seat, are the principal towns.

El Dorado.—Extending from the Sacramento valley to the summit of the Sierra Nevada mountains, a distance of 85 miles, embracing an area of 1,872 square miles, and containing a portion of Lake Tahoe upon the crest of the Sierras, and with a population of 10,309, consisting of 6,287 Americans and 4,022 foreigners, is the county of El Dorado, celebrated in history as the seat of the first discovery of gold in California by Marshall in 1848. This county is in the heart of the great mining region of California. In this county, and upon either side of it, are situated the riverbeds, gulches, and quartz mines from which so many millions of gold have been extracted. El Dorado possesses a variety of soil, scenery, climate, and resources. In the mountain section lofty spurs and crags of the Sierras lift their bald heads, and snow and frost represent winter; but even in the coldest portions of the Sierras winter is short and mild, as compared with many parts of the Atlantic coast. In the mountain section of the county forests of great beauty and value exist, and dashing streams, passing furiously through deep cañons and ravines, lend a charming aspect to the country. In the western portion snow never falls, and here it may be called perpetual summer. The snow line from the Sierras struggles hard to extend its fleecy fringe into the valley, but the warm winds and rains dissolve it before it descends far down the foot-hills. Cattle and sheep graze at large throughout the whole year, except for a short period in winter in a portion of the Sierras. Throughout the valleys there are wide pasture-ranges, and the Sierras in summer are green with native grasses and herbs, affording the best pasture-ranges in the State.

Agriculture is fast developing the great resources of this section, and a wealth more permanent than gold or silver is to be seen in the waving corn-fields, blooming orchards, and vineyards now so successfully cultivated upon the abandoned fields of the pioneer gold-hunter. El Dorado is second only to the county of Nevada in quartz-mining in the State, and is sixth in the counties of the State in the growth of the grape. Coloma, situated thirty-five miles northeast from the city of Sacramento, and the place where Marshall, in 1848, discovered gold, and in the vicinity of which, for so many years, were enacted the wild scenes of early California life, is surrounded with blooming orchards and clustering vines. Fruit-growing is conducted successfully in this county, and almost every variety grows well. In the western parts of the county the mulberry grows to perfection, and the lemon, olive, fig, and orange are cultivated; but these latter do not grow so well as they do in the southern section of the State.

There are a number of towns in this county: Placerville, the county-seat, with a population of 1,562, Coloma, Georgetown, Diamond Springs, El Dorado, and Shingle Springs are the principal ones. Many of the early mining towns in this county are abandoned, and substantial buildings, costing from $5,000 to $20,000 in their erection in early days, are inhabited only by cattle and hogs; but the corn-field, the vine, and the fig tree march steadily toward and overshadow their ruins.

Placer.—North of El Dorado, and extending in a range of eighty miles in length from the crest of the Sierras to within eight miles of the Sacramento, having an average width of eighteen miles and an area of 1,386 square miles, and a population of 11,357, made up of 6,167 Americans and 5,199 foreigners, is the county of

Placer, famous for its rich mines of gold, and partaking of the general features of all the counties in this mountain range. A portion of the eastern end of the county is occupied by the beautiful Lake Tahoe, and the dashing Truckee river passes through a portion of it. Jagged mountain peaks, deep gulches, cañons, and dense forests occupy a great portion of the eastern end of the county, and snow falls to considerable depth. Toward the Sacramento are a succession of rolling hills and rich valleys, and the climate in this section is summer perpetually. Here nearly every branch of agriculture is successfully prosecuted. The grape and nearly all the semi-tropical fruits, including the lemon, fig, and orange, grow. Summer in the mountain ranges is charming, and the green herbage and native grasses afford wide pasture-ranges. In portions of the western side of the county the heat of summer is great, but never oppressive. Cattle and sheep graze at large during the whole year, and altogether the climate is delightful. The great overland railroad passes through this county a distance of ninety miles.

Placer is bounded north by Nevada, east by the State of Nevada, south by El Dorado and Sacramento, and west and northwest by Sutter, Yuba, and Nevada.

The chief resources of the county are mining, agriculture, lumber, and dairying. It is surpassed only by two counties in the State in the growing of peaches, and is the fourth county in the State in the production of wine. Auburn, the county-seat, and Colfax, Cisco, Dutch Flat, Iowa Hill, and Forest Hill, are the principal towns.

NEVADA.—Directly north of Placer, and extending in a direct line from the State line of Nevada on the east

PLEASANT VALLEY, SIERRA NEVADA MOUNTAINS.
(300 miles from San Francisco—Altitude 4,500 feet.)

INTERIOR SNOW-SHEDS, SIERRA NEVADA MOUNTAINS.

to within seventeen miles of the Feather river, at Marysville, a distance of about seventy miles, and having an average width of fifteen miles, and an area of 1,026 square miles, is the county of Nevada, celebrated in the history of California as the greatest gold-producing county in the State. Placer and bank mines of great richness have long been worked in this section; but the quartz mines of the county seem inexhaustible, and still yield beyond comparison with any gold region in the world. The surface of the country is mountainous in the extreme in the region of the Sierras; here, too, vast forests of great beauty and value are found, and dashing streams and beautiful lakes lend a charm to the delightful scenery of this section. The Truckee river, pouring its flood from Lake Tahoe, passes through the eastern extremity of the county. In this quarter snow falls to considerable depth in winter, and for a brief period frost is severe; but summer is delightful, and the native grasses upon the side-hills and valleys of the Sierras afford wide and excellent pasture-ranges. In the western end of the county, toward the Sacramento river, the surface is a series of rolling hills and small valleys. Winter never reaches this section, and here cattle and sheep graze at large throughout the whole year, and fruits of almost every variety, including many of the semi-tropical, grow. The grape, fig, and orange are cultivated, and gardening and dairying are carried on to considerable extent. Like the great interior of California, this section has a long, dry, and hot summer; but the cool nights keep it from being oppressive, and altogether the climate is delightful.

Taken altogether—the inexhaustible gold-mines, the vast forests, and diversified agriculture of Nevada—it is one of the most prosperous counties in the State. The great overland railroad in its course passes for a distance of thirteen miles through the eastern end of the county over the crest of the Sierras; and other roads building will add greatly to the development of this section.

Nevada county is bounded north by Yuba and Sierra counties, east by the State of Nevada, south by Placer, and west by Yuba. The population is 19,134; of whom 10,479 are native American and 8,655 are of foreign birth. There are several growing and prosperous towns in the county. Nevada City is the county-seat, and is a place of considerable population and importance. Grass valley, in the heart of the richest mining region in the world, is an incorporated city, with a population of 7,066. Little York, French Corral, and North San Juan are towns of some importance, all surrounded by rich mining districts.

Sierra.—Adjoining Nevada county on the north, and perched high in the Sierras, bounded north by Plumas and Lassen, east by the State of Nevada, south by Nevada county, and west by Yuba and Plumas, and embracing an area of 830 square miles, and with a population of 5,619, of whom 2,816 are of native American and 2,803 are of foreign birth, is the county of Sierra.

The surface of the county is a succession of abrupt mountains and jagged peaks, some of which stand almost nine thousand feet above the sea. Numerous deep cañons and gulches, with dashing streams and deep forests, lend a wild but picturesque aspect to the country. Small valleys of great beauty and fertility are found, and grazing, dairying, lumbering, fruit-growing, farming, and mining are all carried on successfully.

Great quantities of gold have been extracted from the gravel beds and rich quartz veins of this county, and fortunes have been suddenly realized from rich deposits of gold. Sierra is still only second to Nevada county in her yield of gold, and mines of permanent value are being worked with great profit, and new and rich discoveries made almost daily.

Snow falls to considerable depth throughout the eastern end of the county in winter, and frost is felt sometimes to a great extent; but toward the western part of the county but little snow falls, and cattle and sheep graze in the valleys throughout the entire year. Almost every variety of the hardier fruits grow well, and even the fig and orange have been grown, but none of the semi-tropical fruits do well.

There are no towns of magnitude in Sierra county. The principal ones are Downieville, the county-seat, Forest City, Brandy City, Howland Flat, and Goodyear's Bar.

PLUMAS.—North of Sierra county, and with its whole area in the Sierra Nevada mountains, and at an elevation of from 4,000 to 7,000 feet above the level of the sea, is the county of Plumas: bounded north and east by Lassen, south by Sierra, and west by Butte and Tehama. The area of this alpine county is 2,736 square miles—equal to two States of the size of Rhode Island and 124 square miles to spare. Plumas has a population of 4,490, divided between 2,414 native Americans and 2,075 foreigners, and several growing towns. Quincy, the county-seat, has a population of 640. La

Porte, Granville, Meadow Valley, and Taylorsville are all prosperous towns.

The surface of the country is a succession of high mountains, rolling hills, deep cañons, dashing streams, and large, fertile, and beautiful valleys of unsurpassed agricultural and grazing capacity. Vast areas of this county are covered with dense forests of valuable timber, and placer and quartz mines of great richness are worked with profit. Snow falls upon the high mountain peaks to considerable depth in winter; but frost is not so intense as in portions of the States of Virginia and Tennessee, and in the valleys and ravines cattle, horses, and sheep pasture throughout the whole year. Summer in this county is unlike summer in the valley counties. In Plumas, although the heat of summer is considerable, yet the native grasses and rich herbage of the beautiful valleys and of the hill-sides are fresh and green, and the eye can linger with increasing admiration upon rich meadows, fields of corn, deep forests, blooming orchards, lofty mountains, and laughing streams, frolicking through precipitate gulches and turning the busy wheels of the quartz-mill. Big Meadow valley, fifteen miles in length and four miles in breadth, Mountain Meadows, of nearly equal size, Indian valley, eleven miles in length by two in width, American valley, eleven miles in length by four miles in width, are unsurpassed in beauty and fertility in California; here various branches of farming are prosecuted most successfully. Nearly all the hardier fruits—apples, pears, peaches, plums, cherries, and the grape—do well. Agriculture, dairying, fruit-growing, lumbering, and mining are the resources of the county.

Few counties in California possess greater natural resources than Plumas, and its future prosperity is insured by its rich agricultural and grazing lands.

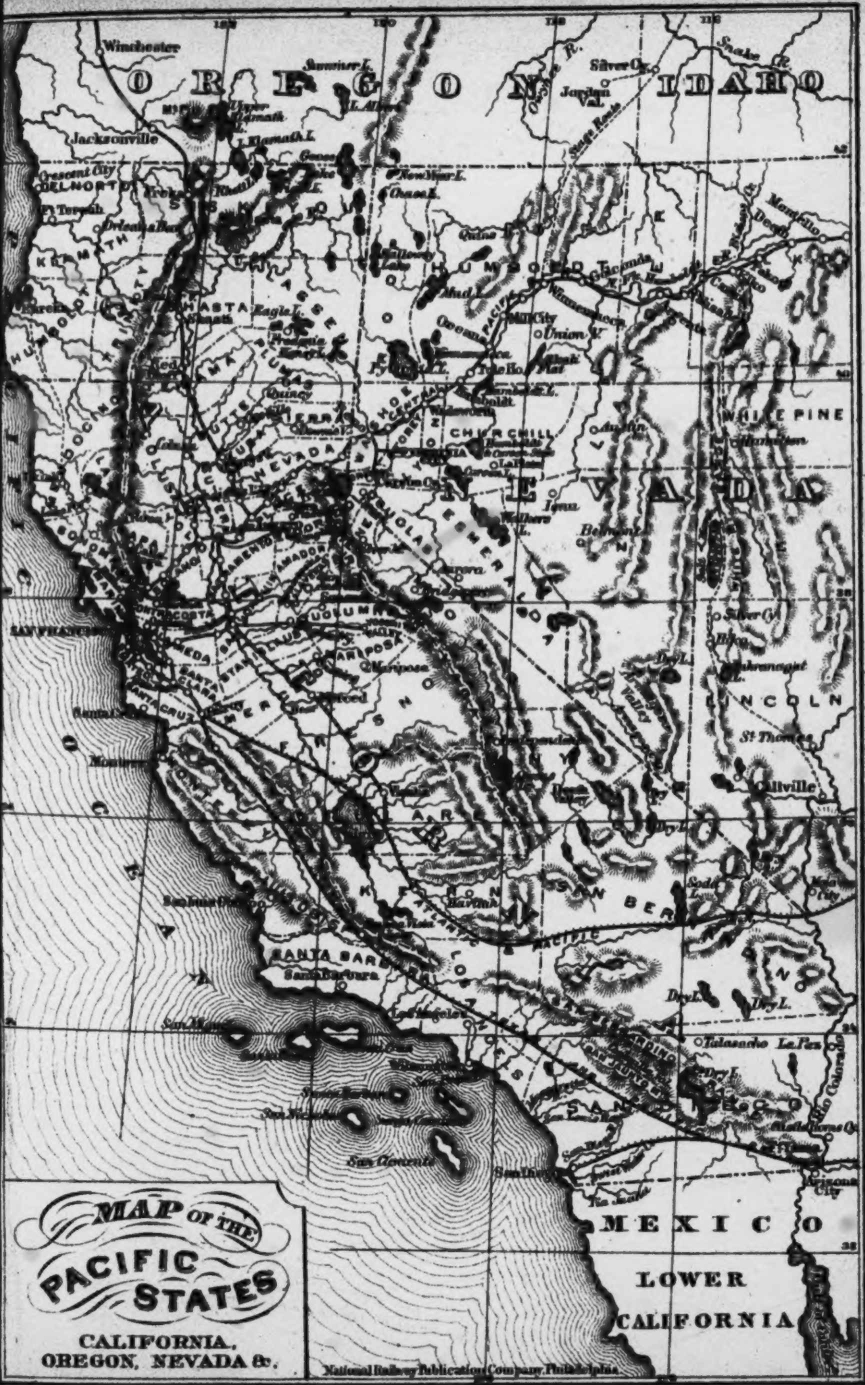
LASSEN.—Directly north of Plumas, situated in the broken spurs of the Sierras, and east of the main chain of these mountains, and with a length from north to south along the line of the State of Nevada of more than 100 miles, and containing an area of 4,932 square miles—182 square miles more than the State of Connecticut—is Lassen county: bounded north by Siskiyou, east by the State of Nevada, south by Sierra and Plumas, and west by Plumas and Shasta.

The county lies almost entirely east of the Sierra Nevada mountains. The general character of this section is essentially different from the counties west of that range. The rolling hills are covered with dense forests of pine and other trees. Alkaline plains and sage brush, broad lakes, fertile valleys, and high mountain peaks make up the physical features of the country.

In winter snow falls to considerable depth, but frost is never severe, and in the valleys and ravines cattle, sheep, and horses graze throughout the whole year. Summer is dry and warm, but not uncomfortably hot. A great portion of the surface is covered with rich native grasses, green throughout the greater part of the year, affording wide and excellent pasture-ranges. Agriculture, grazing, and lumber are the resources of this county. In the valleys grain, vegetables, and the hardier fruits all grow well, and dairying and lumbering are successfully prosecuted. As yet but little has been done in mining, although mines of considerable importance have been discovered.

The population of Lassen county is 1,327; consisting of 1,178 native Americans and 149 foreigners. Susanville, the county-seat, has a population of 640. The other towns are all small.

Siskiyou county, lying directly north of Lassen county, and extending to the Oregon line, and already described, is the last or most northern one of the tier of mountain counties, following the range of the Sierra Nevada mountains, and forming the great gold-producing region of California.



MAP OF THE PACIFIC STATES

CALIFORNIA, OREGON, NEVADA &c.

National Railway Publication Company, Philadelphia.

# CHAPTER XXXI.

Pacific coast—Oregon—Nevada—Utah—Arizona—Idaho—Washington Territory—British Columbia and Alaska.

THE vast region lying west of the Rocky mountains, designated the *Pacific coast*, in which is embraced California, Oregon, Nevada, Utah, Arizona, Idaho, a part of Montana, Washington Territory, British Columbia, and Alaska, contains an area equal to one-half of the whole territory of the Republic of America. The three States and five Territories in this division belonging to the United States contain an area of 1,259,234 square miles, and British Columbia is estimated at 300,000 square miles in extent.

Until a recent period this wide domain, with its genial climate, vast forests, great mountains, magnificent rivers and harbors, broad and fertile valleys, and great mineral wealth, was comparatively unknown, even to the people of America; and although new States have sprung up, cities been built, rivers navigated, and mountains pierced, and the track of the iron horse is found on mountain side and valley, and the seat of new, vigorous, and happy communities find permanent lodgment in the rich soil of the new civilization of the Far West, yet but little is known of the country, even in the States east of the Rocky mountains, and thousands of well-informed persons in Europe and America have never heard of the divisions of this section, nor know their location nor their names.

In preceding chapters, that portion of the Pacific coast more generally known abroad on account of the great mineral wealth, agricultural productions, and matchless natural beauties developed and brought to light since the discovery of gold in 1848, has been presented to the reader; and now the following chapters will be devoted to briefly setting forth the physical features, climate, and vast resources and wonders of that wide area extending from the scorching sands of the Colorado to the stern heights of Oregon and the grim, ice-bound shores of northern Alaska.

The area embraced within the succeeding chapters is entirely distinct in climate, soil, productions, animals, fish, and birds, from any section of the United States east of the Rocky mountains; and, together with California, contain more of the precious metals than all the world besides so far as yet discovered, and its still unexplored and unoccupied regions afford the last remaining refuge for that large element of wanderers and adventurers always pushing ahead of civilization, seeking new discoveries, new homes, and new acquaintances beyond the sound of church-bell and the echo of the steam-whistle. The range for this class is still wide: the red man and the mountain deer have still uncertain tenure of the soil, and the stately elk and grim bear look out from their forest homes, tempting sport for the unerring rifle of the frontiersman; and when the vast regions from the Colorado to Behring Strait cease to afford attractions to the pioneer, man's condition will be so changed that the new civilization built upon the lonely wastes will afford him solace; or other planets will be discovered in which the primitive forests and howling deserts will afford him an asylum.

The marked physical features of that portion of America lying west of the Rocky mountains, so well defined by its volcanic origin and great mineral wealth, as well as by its genial climate and rich soil, give it a distinct character from all that section of the country east of the great mountain division of the continent.

Coal, iron, lead, copper, and petroleum in great abundance, and gold and silver in limited quantities, have been found east of the Rocky mountain chain; but the precious metals of the continent lie west of this division, and are found in and about the Sierra Nevada mountains—the great mother lead of the gold and silver of the American continent.

Brazil, Chili, Peru, and the whole region of South and Central America, rich in gold and silver, and the Republic of Mexico, so famed for its mineral wealth, all go to the Sierra range for their metallic treasures. California, Arizona, Colorado, Nevada, Utah, Oregon, Idaho, Montana, Washington Territory, and British Columbia—some on the east and some on the west of this range of mountains—all derive their gold and silver from the main chain, or from the arms and laterals of the Sierras, which, although passing under different names in different sections, is but the same grand mineral chain, entering the continent at Patagonia, passes northward through the whole of South and Central America, Mexico, California, Oregon, British Columbia, and Alaska, until, in the distant west, it dips into the sea on the frozen shores of the Arctic ocean.

The early history, acquisition, and settlement of the several sections of country described in the following chapters will be found fully set forth in preceding portions of this volume, so that what follows more immediately relates to the natural resources, development, and material growth of the country.

## OREGON.

History—Geography—Climate—Seasons—Forests—Minerals—Mining—Agriculture—Rivers—Mountains—Resources—Progress—Area—Population—Cities—Society.

Oregon, as originally organized, embraced, besides the area of the present State, the area now contained within the Territories of Idaho and Washington; and of the entire domain of the American republic, Oregon, as originally organized, was the only portion acquired by *original discovery.*

The thirteen original colonies were taken from Great Britain by conquest; besides, Virginia claimed, under her original charter from England, an undefined tract, covering what was known as the "Northwestern Territory," embracing the area of the present States of Ohio, Illinois, Indiana, Michigan, and Wisconsin. This claim Virginia granted to the federal government in 1787, and it became a part of the aggregate territory of the republic. The whole territory of the United States east of the Mississippi river, except the State of Florida and a part of the State of Mississippi, was acquired by the United States with the thirteen original colonies. As compensation for spoliations upon American commerce by Spain, the Spanish crown ceded to the United States, in 1819, the territory embraced in the State of Florida and the southern section of the State of Mississippi. The purchase of Louisiana by the American government from the French, in 1803, placed the Americans in the possession of the vast region lying west of the Mississippi, and extending its boundaries to the Rocky mountains in the west, the British possessions in the north, and the Gulf of Mexico on the south.

DEER HUNTING IN OREGON.

Texas was acquired by annexation in 1845, and New Mexico and Colorado by conquest and treaty with Mexico after the war of 1846–8; and Alaska was acquired by purchase from Russia in 1867.

Oregon, discovered by Captain Gray, of Boston, in 1792, was explored by authority of the United States, by Lewis and Clark, in 1804–5. In 1808, the Missouri Fur Company established a post on the head waters of the Snake or Lewis river; and, in 1811, John Jacob Astor, of New York, founded the Pacific Fur Company, at Astoria, near the mouth of the river Columbia. This was the beginning of settlement in the country. At a more remote period, the Hudson Bay Fur Company, an English incorporation, was established in Oregon. This latter company, by its factors and employés, held almost despotic sway over the native tribes and white settlers until 1850.

As early as 1830, emigrants were making their way over the Rocky mountains and into Oregon. The liberal inducement of six hundred and forty acres of land free to every head of a family and three hundred and twenty acres to each person twenty-one years of age emigrating to the Territory, offered by Congress, had, up to 1849, attracted considerable emigration; so that when the gold-fields of California, in 1849, attracted their thousands of miners, Oregon was prepared to supply flour, lumber, butter, eggs, cheese, and fruit to the gold-hunter who roamed over the then untilled valleys of California.

In 1843, Oregon was organized as a Territory, and on the 12th of February, 1859, was admitted a State into the Union. The State is bounded on the south by the northern line of California and a part of the

State of Nevada, east by Idaho, north by the River Columbia, and west by the Pacific ocean. The southern line of Oregon, where it joins the State of California, is in the forty-second parallel of north latitude, and the northern line, at the mouth of the Columbia river, is in 46° 20′ of north latitude.

The area of Oregon is 95,274 square miles—about 61,000,000 acres; and the population, in 1870, was 90,776, of whom 86,929 were white, 346 colored, 3,330 Chinese; and 79,323 were of native American birth and 11,600 of foreign birth.

The physical features of Oregon are rugged hills covered with fir and oak trees; lofty mountains clad in perpetual snow; vast and dense forests of fir and cedar; rolling hills of deep rich soil; extensive valleys of perpetual verdure and unsurpassed productiveness; numerous lakes, springs, and streams; majestic rivers, whose cascades, combined with a rich forest scenery, make Oregon one of the most picturesque quarters of the republic.

The climate of Oregon is mild. Winter, which commences in December, casts its mantle of snow upon the elevated hills, and burnishes anew the high mountain peaks where summer heats are unknown.

Throughout the forest and valley districts snow and ice are rarely seen; and, in the Wallamet and other principal agricultural valleys, it is perpetual summer. Once perhaps during each winter a few inches of snow will fall, but in most of cases it is swept away either by rain or the heat of the sun in one or two days; sometimes it may linger for a week, but this is rare. Ice of a few inches in thickness is formed during each winter in some places, but it remains only for a few days; and, in the agricultural and grazing districts, sheep, horses, and cattle run at large and forage during the whole season. But there are periods in severe winters when snow and cold rains are disastrous to stock, and when the kindly hand of the farmer is necessary to supply them with food; but generally grass is green throughout the whole year, and all stock live at large in the open air.

At Astoria, and along the whole Coast Range, rain falls in great abundance during the winter and spring; but in the interior, and particularly in the eastern portion of the State, the rainfall is not half so great as upon the Coast Range, and the winters, generally rainy, are warm and pleasant.

Fields of growing grain covering the ground may be seen in the months of January and February, and vegetables grow throughout the whole year. In Oregon, as in California, it is not easy to draw the lines dividing the seasons. Winter is known only by the presence of a greater amount of rain and a little colder weather; summer is mild, with showers of rain, blended well into the late spring season and early summer, and the excessive heats of the Atlantic States are unknown.

The hottest days are not oppressive, owing to the coolness of the nights. Once in a great while the heat of summer will reach one hundred and ten degrees in the shade; but, owing to the cool nights, the heat does not reach its greatest extent until early in the afternoon, lasting only three or four hours during the day.

Oregon is as far north as the northern boundary of the State of Maine, but the degrees of cold in each are very different. In many parts of Oregon winter never reaches the freezing-point; while in Maine for six months it is perpetual winter, where frost and piercing winds carry terror before them.

The climate of Oregon is milder than the climate of either Virginia, Kentucky, or Tennessee; and at Astoria, the mouth of the Columbia river, the average temperature is little different from that of San Francisco; the annual temperature being in summer fifty-two and in winter forty-two degrees above zero.

The wide agricultural and grazing ranges of Oregon are well supplied with copious streams from the mountain sides; and the water-power of the State, which might easily be employed in turning the wheels of mechanical industry, is not surpassed in the United States. The Falls of the Wallamet, at Oregon City, are of great volume and force; and the majestic Columbia, having its source in the western slope of the Rocky mountains, far in the interior of British Columbia, where it is fed by the eternal snows of that region, coursing through British Columbia, Washington Territory, and for more than three hundred miles forming the northern boundary of Oregon, with its cascades and numerous falls, affords unlimited motive-power. The River Columbia, forming the boundary between Oregon and Washington Territory, may be classed among the most important navigable rivers of the world, and is surpassed in extent only by one river on the whole Pacific coast of America — the majestic Yukon, of Alaska, flowing for more than two thousand miles toward the sea.

At the historic town of Astoria, in Oregon, where the Columbia empties into the Pacific ocean, it is a broad and noble stream; and for one hundred and sixty miles—to the Cascades—affords a navigable course for

HORSE-TAIL FALL, COLUMBIA RIVER.

VIEW ON THE COLUMBIA RIVER.

ships and large ocean-steamers. At this point a railroad of six miles in length, on the Washington Territory side, and which was completed on the 21st of April, 1863, and a road, a distance of thirteen miles, built in 1864, at the Dalles, lead to the waters above; where, for a distance of more than four hundred additional miles, the Columbia is navigated by steamers and sailing vessels; Lewiston, on the Snake river, in Idaho, being the head of navigation upon its southern branch. But continuing the course of the main Columbia still beyond Wallula and the large lakes through which it passes through British America, it is navigable for light draught boats for one thousand miles from the ocean, the only obstacle being the cascades and the wide bar lying outside the mouth of the river, where the channel is shifting, the water shallow, and generally a heavy, rolling sea, rendering navigation perilous.

The next river of magnitude in Oregon is the Wallamet, having its source in the eastern side of the Cascade range of mountains, and running from east to west a distance of about one hundred and seventy-five miles, passing through the centre of the extensive and fertile valley of the Wallamet, forming the falls at Oregon City, and emptying itself into the Columbia twelve miles below the city of Portland, the chief city of Oregon, and the head of navigation for ocean vessels on the Wallamet.

From the mouth of the Wallamet, twelve miles below Portland, to the latter city, ocean steamers run regularly; and from that city to the Oregon City falls, a distance of twelve miles above Portland, steamers of light draught have navigated for the last twenty years, and above the falls, for the whole length of the Wallamet, small steamers run; and for more than twenty-five years the waters of the Wallamet and Columbia have been the only highway and outlet of all the business and commerce of Oregon.

Lines of railroads now in operation and building throughout Oregon will connect that State with California on the south, Puget sound on the northwest, and, joining the great overland road, will place the heretofore isolated State of Oregon in direct railroad communication with all parts of the Pacific coast, and open up a market for her rich products in all parts of the Atlantic States, the Pacific coast, and Asia.

In the northeastern portion of the State are several rivers of magnitude—the Des Chutes, John Days, Umatilla, Lewis or Snake river, being the principal ones.

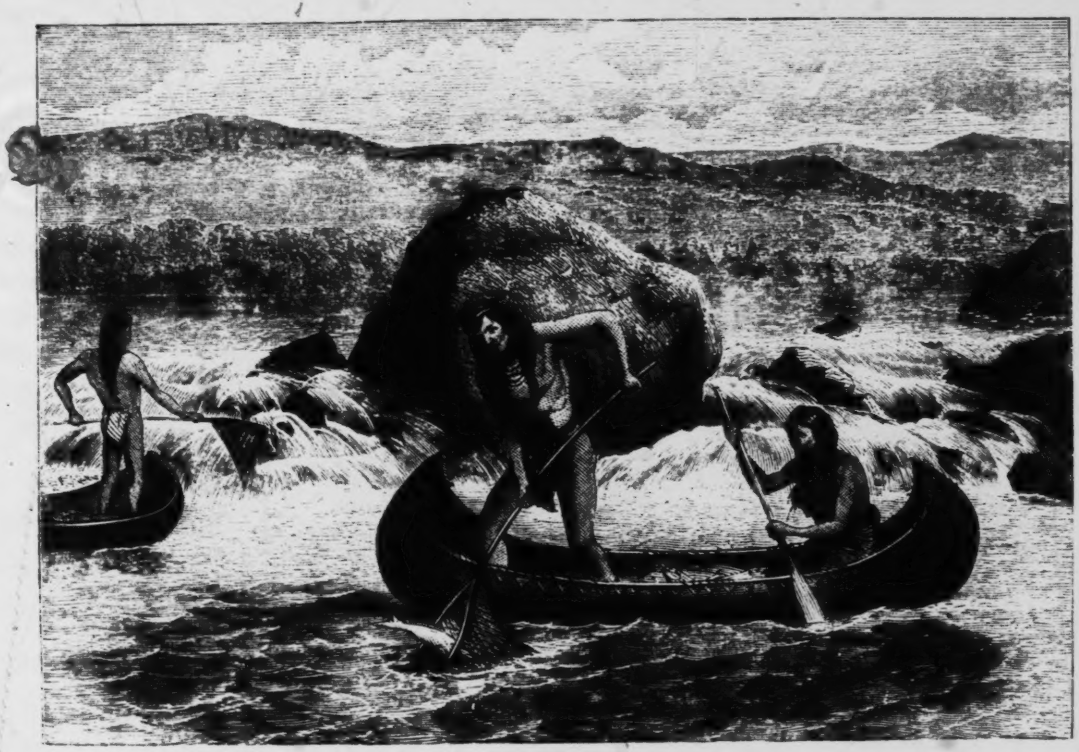
The sea-coast of Oregon from its northern extremity to the California boundary is almost a straight line from north to south, without any prominent capes or headlands. Numerous inlets and harbors indent the coast; but there is no river of any great magnitude south of the Columbia.

The Rogue, Umpqua, Coquett, and Yaquina are the chief rivers on the coast line. They are all navigable for a short distance for steamers of light draught, and settlement is fast making in the rich valleys by which they are surrounded. Oregon is celebrated for its scenery—stalwart mountains, dashing streams, and lofty forest trees. Mounts Jefferson and McLaughlin lift their venerable heads ten thousand feet above the sea, and they, with many others whose summits are perpetual snow, standing above the dense fir forests and green fields of summer, present a panorama of unsurpassed beauty; but towering above all, and looking down upon the beautiful valley of the Wallamet, with its meandering streams, tall forests, cultivated fields, blooming orchards, vast herds and flocks, active industry, and happy homes, is *Mount Hood*, nature's grandest monument in the wilderness, lifting its head 11,218 feet above the sea level, and teaching the lesson of ages to the beholder. This sentinel of eternity, wrapped in his fleecy robes of ermine, looks from his throne of clouds upon the busy scenes of men, and out upon the crested main of the ocean, whose cooling breezes have fanned his silvery locks from the period of creation.

What the temple of Mecca is to the good Mohammedan Mount Hood is to the Oregonian. In the still night, when, by the light of a solitary star, he followed the lazy ox-team, or fled before the murderous tomahawk of the red men, this monumental pile was his beacon and his guide; and now, when the fingers of time have wrought his locks with silver threads, and his step grows feeble, the venerable pioneer, leaning upon his staff, points to this hoary king of the West, and, with trembling accents, and a reverence akin to idolatry, tells to his children's children the eventful story of his early life—his pilgrimage across the plains, his struggles and adventures in the forests of distant Oregon.

There are three principal mountain chains in Oregon—the *Cascade*, Blue mountains, and the *Coast Range;* the latter running from the California line to Astoria, and in many places leaving broad valleys lying between it and the ocean. This mountain chain is rugged, and great portions of it are covered with dense forests of fir and other trees. Innumerable streams course down both sides of this mountain range. Owing to the good supply of water, abundance of grass, and the fogs and damps of summer from the ocean, the whole western slope of the Coast Range, with the belt of valleys between it and the Pacific, affords the best pasture region on the whole coast. Throughout the southern portion of this mountain chain rich mines of gold, silver, copper, and other minerals have been discovered, and are being worked with profit. A hundred miles inland from the Coast Range, and running parallel with it from north to south for the whole length of the State, is the *Cascade range* of mountains, a continuation of the Sierra Nevada mountains in California. In this chain there are many lofty mountains, including Mounts Jefferson and Hood, the latter being the northern terminus of the chain, and located twenty miles directly south of the Columbia river at the Cascades. It is between these two chains of mountains that the beautiful and fertile valley of the Wallamet is situated, in which the great agricultural wealth of Oregon is found. In the Cascade range, as in the Coast Range, rich deposits of the precious and other metals are found, and many mines are being worked with good results.

One hundred and fifty miles east of the Cascade mountains is another mountain chain, running parallel with the Cascades and forming the third grand mountain range of Oregon. This latter chain, known as the *Blue mountains*, although one hundred and fifty miles from the Cascade or Sierra range, is but a portion of the great Sierra chain, flung one hundred and fifty miles farther eastward; and, like the Sierras, it throws its deposits of gold, silver, and other metals far upon either side, and holds in its granite vaults untold millions of the precious metals. Mines of great richness



CATCHING SALMON, COLUMBIA RIVER.

are being worked in this section, and the yield of the precious metals is steadily on the increase in Oregon: *three million dollars* of gold and silver being now produced annually.

The vast area of Oregon lying east of the Cascade mountains, embracing more than two-thirds of the area of the State, and known as Eastern Oregon, differs in its physical features and climate materially from the western portion of the State. The winters are comparatively dry, and but a small amount of snow falls upon the mountains. Much of the country is covered by high table-lands, alkaline plains, sandy and volcanic deserts; but there are innumerable rich valleys, well watered and of the best quality of agricultural lands and wide pasture-ranges, abundantly supplied with native grasses, which make this section of the State valuable as a grazing region. Much of the mountains and rolling hills are covered with fir, pine, oak, and other timber, but generally of an inferior growth when compared with the same species west of the Cascade mountains.

The southeastern part of Eastern Oregon has a great number of lakes, many of them of considerable size. Klamath lake, situated close to the Cascade mountains, and Lower Klamath lake form one continuous sheet of water of fifty miles in length. The southern part of the Lower Klamath is in California, and the remainder, including Klamath lake, in Oregon. The Klamath proper is thirty miles in length and fourteen miles in width. There are several other lakes of almost as great proportions as this and great numbers of smaller ones, some of which are filled with fish, and some so impregnated with alkaline that no living thing is found in their waters. Many of these lakes are the home of millions of wild fowl—geese, ducks, and crane.

Throughout the northern portion of Eastern Oregon, the Des Chutes, John Day, Umatilla, and Snake rivers supply an abundance of pure water, and salmon and trout are found in great numbers.

Oregon is famous for its wild game. Elk, deer, antelope, bear, geese, ducks, swan, quail, grouse, and crane are plenty; and the Columbia and all the principal streams abound in salmon and other fish; and the fur-bearing animals—the beaver, otter, and mink—are still plenty: but the posts established by the American, Hudson Bay, and other fur companies have all been abandoned, and the fur trade of the State is smaller and conducted only by private individuals.

Wild berries in great abundance and variety grow in Oregon; and salt springs and other mineral waters are found. Mines of coal and iron are worked successfully; and copper, lead, marble, and limestone are found in many sections of the State, and of superior quality.

The forests of Oregon are unsurpassed in the world. Vast districts of country of rolling hills, mountains, and level lands are covered with forests of fir, tall and erect, without a limb, save a bunch upon the top. These forest trees generally stand about two hundred feet in height, and running from four to ten feet in diameter; but many of the trees grow to three hundred feet and more in height, and attain a diameter of from eight to twelve feet. A large timber-trade is carried on in Oregon with California and other parts of the Pacific coast; and the supply that could be furnished by her forests is beyond calculation. Fir is the great staple timber of the country. Cedar, oak, ash, pine, and some other varieties grow in considerable quantity; but, like California and all the Pacific coast territory, Oregon does not produce the fine white and yellow pine, nor the maple, birch, and beech of the Eastern States and Canada. In fact not a tree of these beautiful varieties of timber is to be found upon the whole Pacific coast; still there are many varieties useful in ship and house building, and very beautiful for furniture and ornamental work.

Agriculture is the chief industry of the people of Oregon. The mild winters, genial climate, rich soil, and summer showers always insure good crops. There never yet has been a failure of the wheat or other grain crop of the State; and the average product per acre in wheat, oats, rye, and barley is a third greater than any of the States east of the Rocky mountains. Oregon and California average nineteen bushels each of wheat to the acre, while Virginia produces but nine bushels, South Carolina but seven, and Tennessee but eight and a-quarter. Wheat, oats, barley, potatoes, corn, flax, hemp, tobacco, hops, vegetables of all kinds, apples, pears, plums, cherries, and berries of almost every variety grow most abundantly: grapes, peaches, and some other varieties of fruits do not grow so well as they do in California, but in many localities grapes do well.

The great staple product of Oregon is wheat. It was from the rich valleys of Oregon that the California miner in early days received his supply of bread, and to the present time, notwithstanding California exports largely of wheat and flour, Oregon flour is sold in the California markets. At Portland, and other towns in Oregon, ships load with wheat and flour for the markets of Europe, Asia, Australia, and the islands of the Pacific;

and agencies for the sale of Oregon flour are established in San Francisco.

Apples in great quantities are shipped from Oregon to California and to all ports along the coast, and to British Columbia. The rapid growth of fruit trees in this State is remarkable: ten and twelve feet are often produced in a year, and so abundantly do trees bear at three and four years old that they are often crushed with the weight of the fruit.

Horses, cattle, sheep, hogs, and poultry all thrive well in Oregon, and produce their species at a much earlier period than do their kind in any part of the Atlantic side of the republic. There are in the State 75,000 horses, 4,500 mules, 102,000 cattle, 62,500 milch cows, 150,000 hogs, and 420,000 sheep; there are also 160 miles of railroad, and several roads in course of construction.

The wide pasture-ranges, great variety of native grasses, and mild climate, make Oregon the finest grazing section of the country. In many portions of the State stock-raising is carried on to a great extent, and sheep-raising and wool-growing is receiving considerable attention; and besides supplying several local factories, large quantities of wool are shipped to California and to the Atlantic States.

Many branches of manufacture are prosecuted in Oregon, and the whole business of the State has received a great stimulus from the railroads already constructed and now building in the Wallamet valley. Some idea of the amount of flour produced may be ascertained from the fact that there are eighty flouring mills in operation in the State, many of which produce one hundred and fifty barrels of flour daily; and one, the

MOUNT HOOD, OREGON, FROM THE DALLES.

SCENE ON THE COLUMBIA RIVER.

largest in the State, located at Salem, grinds two hundred barrels per day.

One hundred and seventy saw-mills are employed in making lumber, and fifteen quartz-mills are in operation in the mines. A linseed-oil mill is in successful operation at Salem. There are seven woollen factories in the State, one at each of the following places: Salem, Oregon City, Brownsville, Dalles, Ashland, Aurora, and Dallas. Numerous churches, schools, and colleges attest the progress and refinement of the people. There are twenty-eight newspapers published in Oregon, and eight libraries, (public and society,) with an aggregate of fourteen thousand volumes, which supply in part the reading matter of the people of the State.

On the discovery of gold in California, numbers of the people of Oregon went to the mines, many of whom realized fortunes and returned to their new homes in the beautiful valley of the Wallamet.

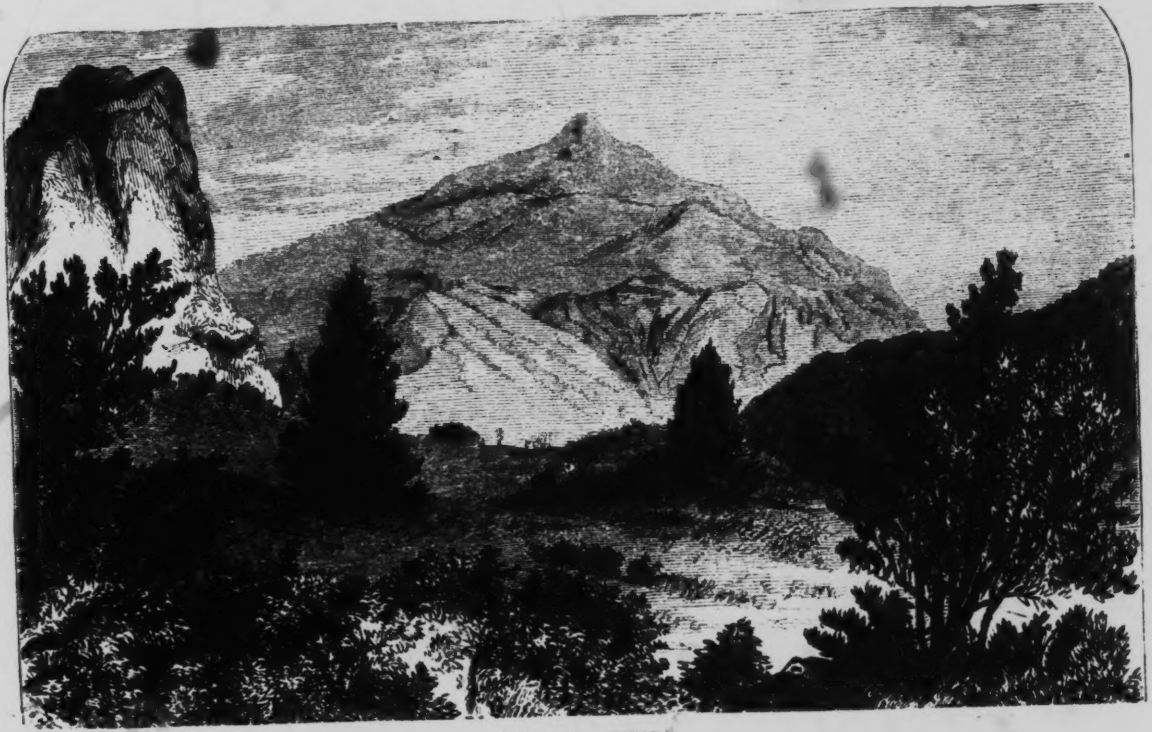
The mass of the people of Oregon, however, never having come in contact with nor been affected by the excitement incident to gold-mining, have remained quietly upon their farms and at their other employments, and, as a consequence, have built themselves up quiet and peaceful homes free from the excitement, extravagance, folly, and unrest incident to early life in California.

The pioneer of Oregon had to contend long and bitterly with the relentless red man for the possession of the soil. A population of about thirty thousand savages, consisting chiefly of the *Walla Wallas*, *Shawnees*, *Chinook*, and *Flathead* tribes, struggled long and fiercely to maintain their ancient hunting-grounds; but at last they gave way before inevitable fate, and the last representatives of the powerful tribes of distant Oregon are fading away before the axe and ploughshare of the invading white man.

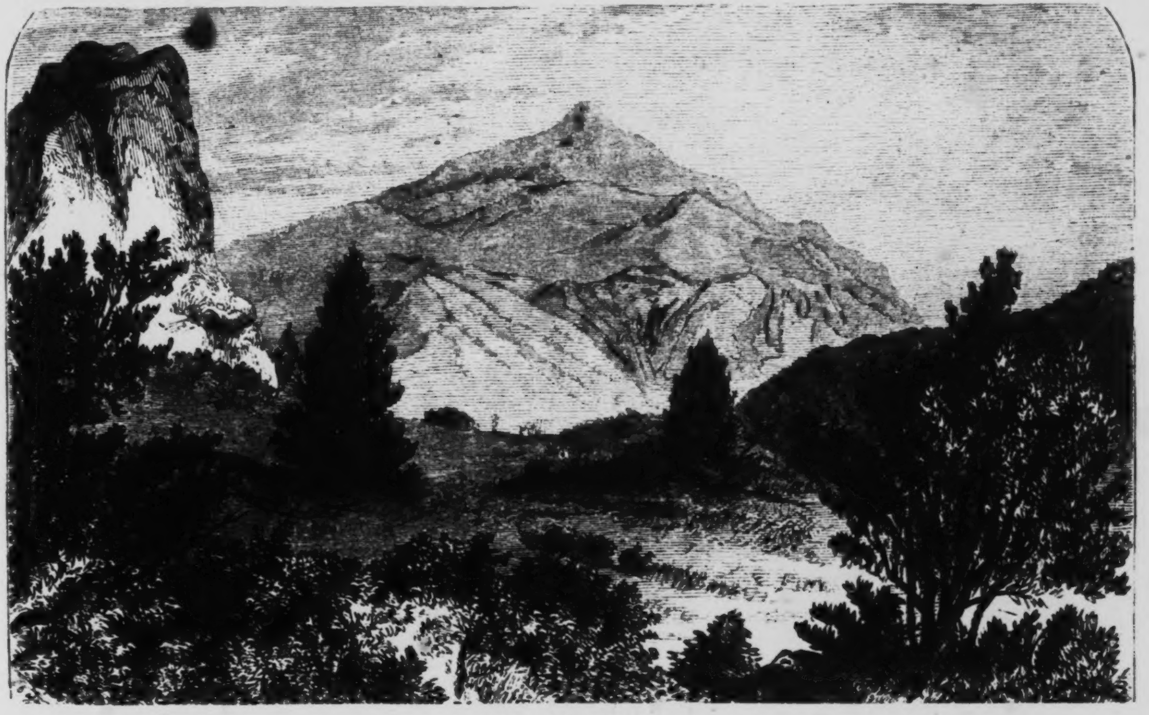
The State of Oregon is divided into twenty-two counties, with the capital at Salem, forty miles by a direct line south of Portland, and on the east bank of the Wallamet river. There are several thriving towns in the State. Portland, with a population of 8,293, of whom 5,715 are native Americans and 2,578 are of foreign birth, is the chief city of Oregon. It is at the head of ocean-steamer navigation, on the west side of the Wallamet, and is substantially built with many elegant houses. Railroads traversing the Wallamet valley and other parts of the State enter this city, whose prosperity is evidenced by its nicely paved streets, elegant stores, hotels, banks, schools, churches, and colleges. Many branches of mechanical industry are prosecuted in this city, which is a port of entry of considerable commercial importance, and for its size is one of the most thriving and active cities in the United States.

Altogether, the genial climate, natural resources, and large areas of good land yet attainable from the government and from occupants at reasonable prices, make Oregon one of the most desirable quarters of the republic for the emigrant in search of a home.

The new-comer will find, besides the great resources and inviting climate, well-ordered society, schools, churches, and colleges, active and progressive men and women, with big, generous hearts and willing hands, and the foundations of a great and prosperous State well established.



STAR PEAK.—NEVADA.



STAR PEAK—NEVADA.

# CHAPTER XXXII.

## NEVADA.

Acquisition of—Area—Population—Geography—Mountains—Valleys—Lakes—Rivers—Forests—Soil—Seasons—Climate—Mines—Mining—Minerals—Counties—Cities—Progress—Schools—Newspapers—Libraries—Future prospects.

NEVADA, known as the *Silver State* on account of its extensive silver-mines, lies directly east of the State of California, from which it is separated in its division line by the crest of the Sierra Nevada mountains. The area now forming this State was originally a part of the Territory of California, and more recently of a portion of the district embraced within the Territory of Utah, and was acquired by the United States from the Republic of Mexico, by the acquisition of California, in 1846. In 1861, a territorial government was established by act of Congress, and, in 1864, it was admitted a State in the Union, with a very small population.

The area of Nevada is 81,531 square miles, and its population, according to the federal census of 1870, was 42,491, of whom 38,959 were white, 357 colored, and 3,152 Chinese. Of the whole population, almost one-half were of foreign birth, there being 23,690 native born and 18,801 foreigners.

Nevada is bounded on its extreme southeastern corner by the river Colorado, which separates it from the Territory of Arizona. Utah forms the eastern line and Oregon the northern. On the west, the crest of the Sierras forms the line between this State and the State of California. The beautiful Lake Tahoe, seven thousand feet high, in the top of the Sierras, is partly in Nevada and partly in California; and in this region, as in many other parts of the State, the scenery is magnificent, abounding in rugged mountain peaks capped with snow, dense forests, and beautiful lakes.

East of the Sierras the climate is entirely different from that of California, immediately west of them. The climate of Nevada is colder in winter and generally with less rainfall than the former. Snow covers all the high mountain ranges and hills, and even for a brief period reaches the valleys; but generally throughout the rolling hills, pasture ranges, and agricultural sections snow falls but little, and cattle and horses graze at large throughout the entire winter, and in many of the valleys snow is never seen. The climate of the State is much milder than that of either of the States of Virginia or Tennessee. The surface of the country is a succession of rugged mountains, broad alkaline flats, rolling, gravelly ridges, and sandy deserts, interspersed with small fertile valleys, rich river bottoms, and ravines.

From the mountain ridges pour down dashing streams, soon, however, lost in the flats below, where they bury themselves in the earth, thus leaving many rich valleys entirely destitute of running streams, and lending an aspect of desolation and barrenness to large areas of productive land. In this State is presented the singular phenomenon of the creeks and rivers pouring into caverns in the earth, running many miles under ground, and rising to the surface again; but only to again dip into the ground, where their course is lost sight of forever.

The principal rivers of Nevada are the Humboldt, Truckee, Carson, and Walker. Humboldt river after passing for three hundred and fifty miles from east to west, empties into Lake Humboldt, in a deep valley in the western portion of the State. Carson and Walker rivers, having their source in the eastern side of the Sierras, pour their floods into Carson and Walker lakes, and, like the Humboldt, are lost to view forever. Truckee river has its source in the waters of the beautiful Lake Tahoe, situated upon the crest of the Sierras. Tahoe is twenty-one miles in length, twelve miles in width, and elevated 6,250 feet above the sea level, and forms a part of the boundary between California and Nevada. From this lake the Truckee pours in a mighty torrent, for the first few miles passing through deep cañons, gulches, and ravines, forming rapids and cascades of great power and beauty. The river in its course runs from Lake Tahoe in a northeasterly direction for a distance of more than eighty miles, and until it reaches Pyramid lake, on the eastern slope of the Sierras. This charming lake is thirty-five miles in length, ten miles in width, and elevated 3,940 feet above the waters of the Pacific ocean. Thus the waters of Lake Tahoe empty into Pyramid lake, but Pyramid lake, like Humboldt, Carson, Walker, and all the other lakes in the State, has no visible outlet, but pours the mighty tide of the Truckee, together with its own waters, into the bowels of the earth, which, with the waters of all the rivers and lakes of the State of Nevada, must pass under the Sierras, or to the Colorado river—hundreds of miles—before a final outlet is found in the Pacific ocean.

On the eastern slope of the Sierras, and some other mountain ranges in Nevada, there are heavy growths of timber, but generally the State is but poorly wooded;

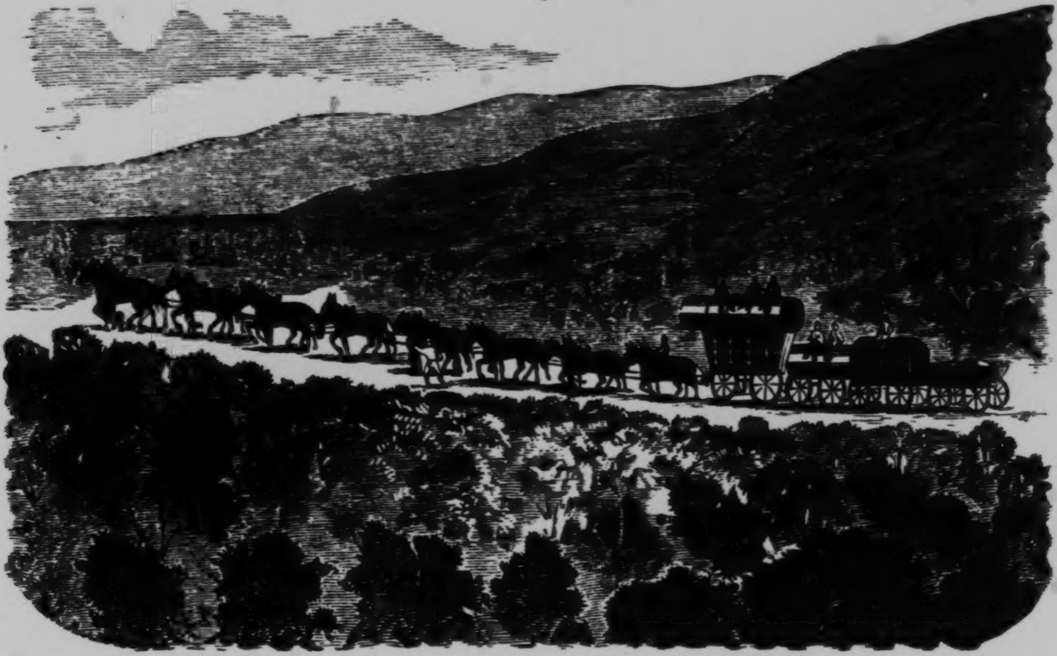
and the plains and valleys are destitute of trees, except where fringes of cotton-wood or willows skirt the rivers and streams.

In the mountains wild game is abundant, and the Truckee and other rivers abound with trout. The native tribes of Indians are of a very low order, and, although treacherous and cruel, are not warlike, and generally give but little trouble to the whites.

Agriculture is carried on to considerable extent, and there are large areas of tillable land which might be brought into a high state of cultivation by carrying water in ditches from the mountains. There are wide pasture-ranges in the State well adapted to cattle and sheep; and large herds of horned cattle graze at large during the whole winter.

The material growth of Nevada has been very great during the past ten years; and the State may be considered as in a prosperous and progressive condition.

At the end of 1870, the population of Nevada was 42,491; and her taxable property, independent of mines, was $32,524,600, and her working mines were valued at $30,000,000—an aggregate of more than $62,000,000, or about $1,500 for each inhabitant in the State. Nevada stands the highest of all the States in the Union in the average production of wheat; and equal with California and Oregon, the highest average producing States in the Union, in barley, oats, rye, and potatoes. California and Oregon yield nineteen bushels of wheat to the acre; while Nevada produces twenty-three. Illinois yields twelve bushels, Indiana eleven, and Tennessee and Virginia each but eight bushels to the acre, on an average.



BOILERS AND MACHINERY GOING INTO THE SILVER MINES, NEVADA.
(Load weighing 56,000 pounds.)

The live stock in the State consists of 8,600 horses, 1,000 mules, 26,700 cattle, and 12,800 sheep.

The mineral wealth of Nevada is not surpassed by the richest parts of the great mineral region of the Pacific coast. The annual yield of the precious metals has been about $15,000,000; at the present period it is $25,000,000 per annum. This is the present annual yield of the California mines. Rich discoveries of the precious metals are being daily made in this region, so lately appearing upon the maps of America as "unexplored;" and it would seem that nature had deposited her richest treasures in the mountains and rugged hills of this remote section, and that through toil, privations, dangers, and poverty, the pioneer and hardy miner should open the vast gold and silver vaults of Nevada to meet the growing wants of the new civilization pushing westward toward the direction of the setting sun, and the exigencies of complicated internal disorders of commerce.

As early as 1850, gold had been discovered in Nevada, but until the discovery of the famous Comstock lode at Virginia City, in 1859, but little mining had been done in this region; and the country, a wild and uninhabited desert, was regarded as the most worthless and desolate portion of the American continent. In 1859, and succeeding years, the discoveries of great deposits of gold and silver in the mountains produced a panic throughout the whole Pacific coast, almost depopulating many sections of California, from which latter State Nevada has received almost her entire population.

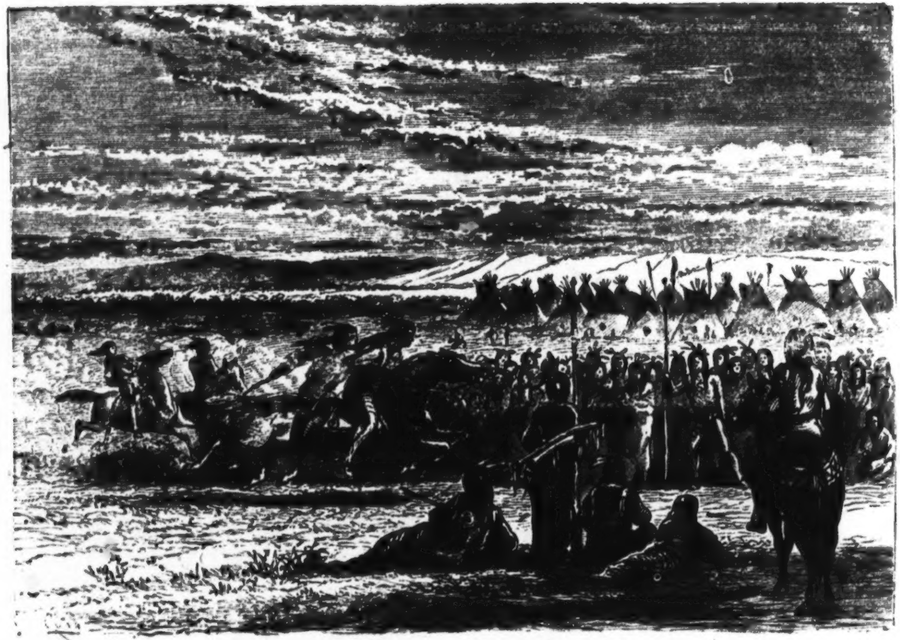
Previous to the year 1859, but about $400,000 in gold had been obtained in Nevada; since that period to the present, the yield of gold and silver has exceeded $135,000,000.

Marked industry and perseverance are leading traits among the population of Nevada, and the vast amount of labor being expended upon the mines of the State may be partially understood by the fact that there are 156 quartz-mills, with an aggregate of 2,200 stamps, employed in reducing ores. But the wealth of Nevada does not consist alone of her agriculture, and gold and silver mines, but also in her rich and boundless deposits of other minerals: iron, copper, carbonate of soda, sulphur, alum, and other minerals of superior quality, and in great abundance, exist throughout the State. Salt, so important an article, and so much employed in the working of ores, is found in such vast quantities that it is supposed that there is salt enough in Nevada to supply the markets of the whole United States. Salt is found in almost every county in the State: it is found upon the surface, and in vast beds in the earth, where it can be shovelled up white and pure, and of the best quality. Doubtless at one time large salt lakes, or perhaps the ocean, covered vast areas of the surface of what is now the State of Nevada, and doubtless to this fact may be attributed the presence of such extensive salt-beds as are found in this State. In one section of the southern part of Nevada, a single salt-bed of great depth and of superior quality covers an area of fifty square miles. Salt springs and deposits of salt are things which exist all over the globe, at least in most countries; but it seems to have been left to this section (Nevada) to rear a mountain of this useful mineral. In Lincoln county stands a solitary mountain of pure salt, transparent as crystal and of superior quality.

Mining, agriculture, lumbering, cattle and sheep raising, and many other branches of industry, are carried on most successfully in Nevada. The great overland railroad connecting San Francisco and New York passes through the whole width of the State, giving a stimulus to business, and inducing investments in mining interests; and various other roads, projected and building, indicate the speedy development of this section. Already there are six hundred miles of railroad built in Nevada.

The State is divided into fourteen counties, and in the mining districts there are several growing towns. Carson City, at the eastern base of the Sierras, is the capital of the State. It is built on a low flat, where the skirts of the Sierras reach a fertile valley. The population of the city is 3,042; of whom more than half are foreigners, there being 1,606 of the latter, and but 1,436 native Americans. Virginia City, the largest city in the State, a few miles east of Carson, and built upon the high ridge and over the great Comstock lode—the richest and most extensive quartz-mine in the world—has a population of 7,048, almost equally divided between native and foreign born, there being 3,592 of the former, and 3,456 of the latter. White Pine, in the centre of a newly discovered and rich mining district, although scarcely a hut had been built in it two years before, had, at the beginning of 1871, a population of 7,200. Austin, Belmont, and several other growing towns in the mining districts indicate considerable activity and signs of general progress. The State has in operation 156 quartz-mills, seven flour-mills, and twenty-two saw-mills. Schools, churches, theatres, and elegant dwellings in all the towns and villages exhibit the industry and intelligence of the people, who maintain in their State thirteen newspapers, and an aggregate of 160,000 books in its libraries.

Notwithstanding the wide areas of barren, alkaline, and sandy deserts of Nevada, enough of good soil, wide pasture-ranges, forests, lakes, rivers, and mines of gold, silver, and other minerals exist to warrant the permanent wealth and future greatness of this young and sparsely populated interior State.



INDIANS HORSE-RACING ON THE PLAINS.

GENERAL VIEW OF SALT LAKE CITY, SHOWING THE MORMON TABERNACLE.

# CHAPTER XXXIII.

## UTAH.

Area--Acquisition—Climate—Seasons—Mines—Mining—Minerals—Mountains—Lakes—Rivers—Agriculture—Education—Material development—Mormons—Society—Population—Great Salt lake and Salt Lake City—Overland railroad—Discovery and history of Salt lake.

THE Territory of Utah, embracing an area of 106,382 square miles, is situated directly east of the State of Nevada, and is bounded on the west by Nevada, north by Idaho and Wyoming, east by Colorado, and south by Arizona.

The area comprising Utah, like that of Nevada and a great part of the Territory of Arizona, formerly belonged to the Mexican Territory of California, and title to it was acquired by the United States when, in 1846, Commodore Sloat took possession of California by hoisting the American flag over the Mexican territorial capital at Monterey, and by subsequent treaty between the United States and the Republic of Mexico

The Territory, as now bounded, is situated directly in the line of the overland railroad connecting San Francisco with Chicago, New York, and other eastern cities. Ogden, at the head of Great Salt lake, is 881 miles east of San Francisco and 1,913 miles west of Omaha. The road, running in an easterly and westerly direction, passes through the extreme northern end of the Territory, and close to the northern end of Great Salt lake, and through the city of Ogden, and distant from Salt Lake City about thirty-six miles. Between this point and the chief city of the "Saints," connection is made by a branch railroad uniting the city of Ogden and Great Salt Lake City.

The climate of Utah is mild in many parts, and nearly all the tropical and all the semi-tropical fruits grow well in the southern districts. Snow seldom falls in the valleys, and the rainfall is much less than in the northern part of California. Altogether, the climate is delightful, and in comparison with the country directly east of the Rocky mountains, and in the same degree of latitude throughout the whole Atlantic coast, it might be termed perpetual summer.

The northern part of the Territory is mountainous, and in these regions snow falls to a great depth in winter, and for several months the hills and mountains are clad in great depths of snow, and cold is intense.

Mines of the precious and other metals are found throughout the hilly sections, and the yield of silver during the past few years has greatly increased, inducing foreign and American capital to embark quite largely in the development of the great silver veins of this Territory.

Valleys of great extent and unsurpassed productiveness are numerous, and many of them are well watered by the innumerable streams pouring down from the mountains and emptying their floods into the lakes below, and by canals and ditches. In the southern section of the Territory, the surface is much more level and less broken by jagged mountain ranges than in the north, and in this quarter there are wide ranges of unproductive and barren soil. But there are also innumerable valleys of great beauty and fertility, producing grain, fruit, vegetables, tobacco, and cotton. Through this section, added to a genial climate and rich soil, are the almost countless branches of the main Bear river, Colorado, Sevier, Ogden, Weber, Green, and Grand rivers—supplying the country abundantly with water.

The Colorado river proper (but near its source known as the Green river) has its fountain-head in the western base of the Rocky mountains, in the centre of Wyoming Territory, from which point it passes in a southwestern direction in its serpentine course, for more than fifteen hundred miles in length, until it reaches the Gulf of California, through which it finds a passage for its waters to the Pacific ocean.

Utah, under the stimulus of railroads, the opening of her mines, the development of her agricultural resources, and the industry of her people, is fast assuming marked indications of permanent prosperity. The hand of skilled labor is leading the cooling waters of the high mountain streams and lakes into the parched valleys, and converting seeming sterile and desert wastes into fields of waving corn, and gardens and orchards of beauty and great value.

The productiveness and fertility of the soil is unsurpassed by any section of the country. Large areas under wheat produce as high as twenty-two bushels to the acre; barley, twenty-nine bushels; corn, twenty-four bushels; oats, thirty-three bushels; and potatoes, one hundred and twenty-five bushels: these are about the average productions, and far surpass the yield of any State or Territory east of the Rocky mountains.

Public schools are maintained by law. In 1870, there were 200 school districts and 25,000 school children between the ages of four and sixteen years in the Territory. Polygamy being a part of the religion of the people, the increase of children, in proportion to the population, is remarkably large as compared with other sections of the country.

The mineral wealth of Utah, which, until recently, had been almost entirely unknown, is fast attracting public attention; and the annual product of gold and silver is estimated at $2,500,000, with every prospect of a large increase. But the wealth of the Territory is not confined to the precious metals. Iron, copper, lead, and many other minerals abound throughout the country, and inexhaustible beds of superior coal have recently been opened, and the great salt inland sea of Great Salt lake—seventy-five miles in length, thirty-five miles in breadth, and 4,300 feet above the sea—supplies unlimited quantities of salt.

A half a century ago the foot of a white man had not entered the vast region of the "Great Salt Lake desert," and the people now knocking at the doors of the national halls of legislation for the admission of the State of Deseret were scattered in every corner of the globe, and might still be beyond the Rocky mountains and over the seas in interior Europe had it not been for the quickening impulse of the "spirit of prophecy" and the new revelation to the "prophet Joseph" of the new religion through which wandering spirits could easily reach the abode of the blessed, and rejoice with their fathers through righteousness and the deeds done in the flesh.

Agriculture and stock-raising are the chief occupations of the people, but recently a variety of manufacturing industries and mining occupy a large portion of the skill and labor of the people of Utah, great numbers of whom belonged to the laboring classes of Europe before joining the Mormons, and who carry into their business affairs the marked industry and frugality of the European peasantry.

There are in the Territory, besides other marked signs of material prosperity, fifty-five grist-mills, fifty-two saw-mills, several quartz-mills, and many in course of construction; eight newspapers and thirteen libraries—public and county—with an aggregate of fourteen thousand books.

Bear River, Jordan, and Salt Lake valleys are very productive, and possess great advantages for the prosecution of diversified agriculture; but interspersed among the mountains, lakes, and fertile valleys are wide ranges of most uninviting country, in some places covered with white sage; in others, the surface is gravelly, dry, and sandy, without the sign of vegetable or animal life. These wide areas, added to the bald hills and ridges, without tree or shrub as far as the eye can reach, present a most desolate aspect.

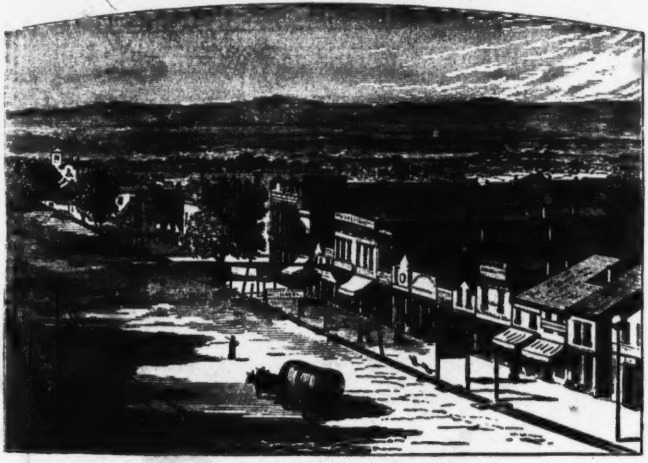
Utah, like a large portion of all that region in its vicinity, is quite destitute of forest trees, and the evils experienced by farmers and others from this cause alone are very great. In the vicinity of Salt Lake City no trees grow except a few that have been planted, and the nighest fuel supply of wood to the city is at a distance of fifteen to twenty-five miles, and twenty and forty miles is not an unusual distance for the people to draw their scant supply of fuel.

Owing to the want of summer rains, and the alkaline and light soil in many places, agriculture is only made profitable by the aid of irrigation. Under the rule of the "saints," public officers see that each member of society contribute their time or money to erecting dams, reservoirs, and ditches to lead the waters of the streams into the agricultural districts. By this system, and the industry of the inhabitants, large areas that otherwise must remain totally useless are made to "blossom like the rose" and produce most abundantly.

Nothing so much strikes the traveller through Utah as the dull, quiet, dreamy apathy of the people, and the humble abodes in which they dwell throughout the country. None of the nicely-painted houses, with thrifty flower and kitchen gardens, and bright-faced, clean children, and sparkling-eyed, active mothers, and charming young ladies at the needle or the piano, are seen—not but that the people are industrious enough, but generally the absence of lumber, the long, dry, dusty summers, the scarcity of water, and a general desire to do nothing but what is "useful," with the influence of woman "bound to service and *labor*," give to these people, in their patched-up cabins of bits of boards, rails, slabs, brush, tin, and green hide, the appearance of gypsies rather than of Americans; indeed, it is scarcely just to call the Mormons by the latter name, gathered as they are from every quarter of the globe, holding themselves, in religion, society, and even in government, distinct and independent from the people and government of the United States, and living in a remote and isolated region where they never come in contact with the people of the country in which they have built up their sovereign dominion of Church and State.

Still the Mormons have done much in their heretofore-secluded home. On the arrival of their advance guard at Salt lake, on July 24, 1847, they found the whole land a howling desert—its pasture ranges the

BRIGHAM YOUNG'S HAREMS, SALT LAKE CITY.
(" Bee Hive" on the right, "Lion House" on left. Young's office, central building.)



STREET SCENE IN SALT LAKE CITY.

WITCHES' ROCKS, ECHO CAÑON, UTAH.

STARTING FOR THE SILVER MINES, UTAH.

A WAGON-LOAD OF MORMONS AT OGDEN CAÑON.

home of the buffalo and deer; its hills the haunts of voracious beasts and savage men; and its sandy wastes the sepulchres of their fellows and the "valley of death" to their famished and burdened beasts.

Who can recount the trials and privations of these people, and not feel a pang of pity for the masses led on by a few designing knaves, seeking their own aggrandizement through the spirit of "false prophecy" and the superstition of their dupes?

But out of the chaos of the heart of the great desert of America, the combined labor and the indomitable spirit of the people and the leader of the new religion, the followers of "Joseph the prophet," have brought not only peculiarities of religious practices and social *disorder*, but also growing towns, prosperous cities, and dense communities, soon to add a new star to the constellation of our national Union of States.

The federal census of 1870 gives the entire population of Utah at 86,786, about equally divided between the sexes. Of the whole population, 86,044 were white, 118 colored, and 445 Chinese. A great majority of the adult population are of foreign birth, gathered up from every part of Europe by the proselyting ministers of the "Church of Jesus Christ of Latter-day Saints;" and the larger number of native than foreign population appearing in the census returns is owing to the rapid increase of children under the *careful husbandry* of the "saints."

The native population of Utah is 56,084, and the foreign population 30,702; while 60,000 of the population are the children of foreign parents.

Great Salt Lake City, the chief city of the Mormons, and the wonderful inland salt sea of Salt lake, are as well known in history to the whole American people and a great portion of Europe as is the Republic of America itself.

The city, begun in 1847, is situated on the level valley, about 4,300 feet above the sea, in the great "Utah desert," and twelve miles distant from Great Salt lake. A short distance from the city are ranges of hills, deep cañons, and abrupt mountains, clad in perpetual snow; which, with the vast rows of shade trees planted in the streets and gardens of the city, and rippling threads of water passing through the gutters, give a very picturesque and charming view. The streets are laid out at right angles, are broad, clean, and level.

The city proper is about four miles in length and two miles wide, and is chiefly built of *adobe* or bricks dried in the sun; and with these is built much after the manner and has much the appearance of all the old Spanish towns in Mexico and California. These houses make little pretension to architectural beauty; and with low ceilings, small doors, and few and small windows, and, in many cases, ground-floors, contrast strongly with the neat, white house, with green shutters, plate glass, and fine carpets, of the people of New England and the Atlantic States generally. But there are many fin buildings in the city, including the public buildings, (the city being the capital of the Territory,) the Endowment House, Temple Block, the Tabernacle, and the residences and harems of Brigham Young and his apostles.

The population of the capital city is 12,854; of whom 7,604 are of native birth and 5,250 are foreigners. Almost every nationality on the globe is represented here, either for the purposes of trade or the hope of salvation. Every country of Europe contributes members to the Mormon faith—England, Wales, France, Germany, Austria, Russia, Holland, Sweden, and Denmark. Irish and Scotch are scarce, still the Irish Mormon is not unknown; and the Jew, African, and Chinaman embrace the faith and the *plural wives* of the Mormons with avidity and an apparent relish, particularly if they can see ease and money in it.

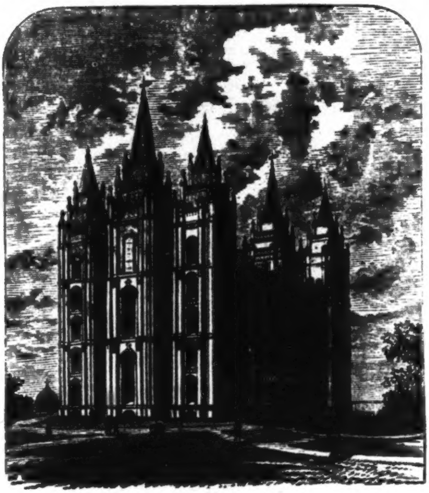
Besides Salt Lake City there are several other cities and towns of importance in the Territory, fast developing into respectable proportions under the stimulus of railroads and the recent rich discoveries of extensive and rich silver mines; but all the buildings partake of the *adobe*, tile roof, low ceilings, and shabby appearance of three-quarters of the houses in Salt Lake City.

Ogden, a shabby-looking place, romantically clustering at the foot of high ridges of volcanic mountains, at the northern end of Salt lake, and thirty-six miles north of Salt Lake City, is the terminus of the Central Pacific portion of the overland railroad, and distant from San Francisco 881 miles. From this point, looking toward the south, is a fine view of Great Salt lake and the snow-clad mountains to the west, which seem to shadow their fleecy crowns in the sea of the desert. Here, passengers overland, going east or west, change cars, although they do not change roads. From this point, a railroad of thirty-six miles in length runs directly south to Salt Lake City; and persons desiring to see the great city of the plains must leave the main road and travel south thirty-six miles.

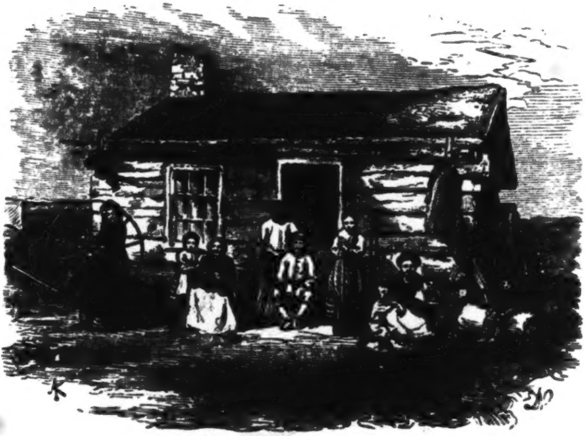
Ogden contains a population of 3,127; of whom 2,086 are native and 1,061 are of foreign birth. Mount Pleasant, another town, has a population of 1,346; of whom 752 are native and 594 are foreigners. Manti has 1,239 in population; and Logan, the only other place of importance in the Territory, has a population of 1,757.

Not the least remarkable of all the natural wonders of this country are its numerous hot and mineral springs, its lakes, and rivers, many of which sink and are lost entirely in the desert. But the most singular and best known natural object in the whole territory is the famous lake—the great inland salt sea of America—*Great Salt lake*, located in what is known as the great interior basin lying between the Rocky mountains on the east and the Sierra Nevadas on the west, and extending from Oregon to the Colorado river: interpersed with lakes, rivers, springs, and geysers, and parallel mountain chains passing from north to south, broken occasionally, as about Salt lake, with jagged mountain peaks and broken ridges elevating as do Mount Nebo, 8,000 feet; Wasatch, 6,000 feet; and Twin Peaks, a little south of Salt Lake City, elevated to 11,600 feet above the sea level. In this region did the early pilgrim to the shrine of mammon in the golden sands of California, and the disciples of the new religion of America, fall fainting by the way in the tedious march over arid plains and burning sands, and famished for want of food and water, chased by fierce bands of painted and plumed savages, or by the fascinating illusions of the mysterious *mirage* lead their weary march toward man, river, ship, or sea, in the gauzy vapors and thin air of nothingness which dissolved at touch.

Geological evidences all teach that, at some remote period, the greater portion of the vast basin of the



THE MORMON TEMPLE, SALT LAKE CITY.



A MORMON FAMILY

PULPIT ROCK, ECHO CAÑON.

MONUMENT ROCK, ECHO CAÑON, UTAH.

interior of America was a sea, of which Salt lake alone remains as a living witness; and the great numbers of hot, mineral, and other springs in and about Salt Lake City, and other portions of the Territory, attest to the fact of recent volcanic disturbances in this entire section.

Great Salt lake, the main objective point of interest in the Territory of Utah, is situated near the northwestern part of the Territory, and at an elevation of 4,200 feet above the sea level. It is surrounded, or nearly so, by ranges of hills, and upon the west with high mountains whose peaks are covered perpetually with snow. The lake is seventy-five miles long in a direct line, and thirty-five miles broad, but its irregular form gives it greater dimensions, and its size, as calculated by skilled engineers, is ninety miles in length by forty miles in breadth. Into this sea of the desert many rivers and streams empty, but the lake is but little changed either in volume or its waters in their great salt-producing capacity. Several large islands are in the lake, and upon them, as throughout the greater part of the territory, the same combinations of hot, sulphur, salt, and other springs are visible.

The water in Salt lake is of an average depth of ten feet, but in many places near the centre its depth is much greater. Reports from time to time of great sink-holes through the bottom of the lake, through which the waters find an outlet to the ocean, or into the depths of the bowels of the earth, are incorrect. So far, no outlet has been discovered for the waters, either by an interior passage or surface stream, and the conclusion that the waters are absorbed by percolation and solar evaporation must be regarded as correct until further evidences of other sources of escape are demonstrated.

Salt lakes, salt springs, salt beds, and salt mountains abound throughout the great interior basin of America. Arizona and Nevada have great supplies of salt in their desert regions, as well as sulphur, alum, borax, soda, and other minerals; but the great salt sea of Utah surpasses all in magnitude and in capability of production.

Notions prevail that the waters of Salt lake are pure brine, but this is incorrect. In some parts of Utah, and indeed close to the lake, are springs and streams of this character, but, while Salt lake is the *saltest* body of water in the world of its magnitude, the great floods of water from rivers and the melting snows of the mountains finding their way into the lake much reduce the saline quality of the water.

The waters of the Atlantic ocean yield about three per cent. of saline matter, while the waters of the Great Salt lake produce twenty per cent. of pure salt. Salt lake contains about a thousand billion solid feet of water, and is capable of producing *five hundred billion tons* of salt, which would supply the wants of the present population of the whole globe for more than a *thousand years.* The salt of this vast inland sea is carried from the deserts, salt beds, hill-sides, and salt springs of the mountain-sides, in solution into this great salt basin.

During the whole period of the colonization of America and the progress of the United States, up to 1845, nothing comparatively was known of the great interior region of the American continent; indeed, until the discovery of gold in California, with the exception of a few trappers, no Caucasian eye had ever seen Great Salt lake and its vicinity. As early as the year

1690, Baron Horton, the French governor of the colony of Newfoundland, had made a journey into the interior of America, and is supposed to have reached and navigated the Mississippi river, in the vicinity of which he learned from tribes of natives, who brought him captives of other tribes, of the existence of a great inland salt sea; and this information, communicated by the Baron to his countrymen, is the first recorded history we have touching this wondrous lake. The Baron writes:

> "The Mozeemlek nation is numerous and puissant. These four captives informed me that, at a distance of one hundred and fifty leagues from where I then was, their principal river *empties itself into a salt lake* of three hundred leagues in circumference, the mouth of which is two leagues broad; that there are a hundred towns, great and small, around that sort of sea, and upon it they navigate with such boats as you see drawn on the map, which map the Mozeemlek people drew me on the bark of trees; that the people of that country made stuffs, copper axes, and several other manufactures."

We next find mention of Salt lake and its vicinity in a publication deriving its authority on this subject from the accounts of the natives of the interior, and issued in 1772, with the remarkable title of "A description of the Province of Carolana, by the Spaniards called Florida, and by the French called Louisiana;" in which is given an account of "a lake many leagues west of the mountains in which there is no living creature, but around its shores the spirits inhabit in great vapors; and *out* of that lake a great river disembogues into the South sea."

In the winter of 1824–5, a party of American trappers, connected with the fur company of Ashley, Henry, and others, found themselves in the vicinity of Great

Salt lake, and James Bridger, one of the number, was intrusted to follow the course of Bear river, in which he was led to discover the lake, and, after tasting its water, had concluded that it must be an arm of the Pacific ocean. In the spring of 1826, four men, in skin canoes, explored its margin and islands in search of an outlet and in pursuit of beaver, neither of which were found. This is supposed to have been the first American discovery of this inland sea, and James Bridger is supposed to have been the real discoverer.

The expeditions fitted out by the United States in 1842–5, under the leadership of John C. Fremont, and subsequent scientific expeditions, brought for the first time to the notice of the general public the wonders of Great Salt lake and its vicinity, and the final settlement of the Mormon pilgrims at this point. The overland emigration to California and Oregon, and finally the completion of the great overland railroad, connecting the Pacific and Atlantic oceans by steam, and passing close to the northern end of the lake, and through the entire length of Utah, has brought this whole region, with its natural wonders and its singular people, into direct contact with the public.

The traveller will now find in Utah, in addition to railroad conveniences, a comfortable steamboat navigating the waters of Great Salt lake.

GEORGE A. SMITH, FIRST COUNSELLOR, CHURCH HISTORIAN. NEXT TO YOUNG IN AUTHORITY.

ORSON PRATT,
ONE OF THE TWELVE APOSTLES.

ORSON HYDE,
PRESIDENT OF THE TWELVE APOSTLES.

JOSEPH SMITH,
Founder of the Mormon Church.

BRIGHAM YOUNG, HEAD OF THE MORMON CHURCH.

JOSEPH F. SMITH.
(Nephew of Jo. Smith, Jr., and one of the Twelve Apostles.)

MRS. ALICE YOUNG CLAWSON.
(Brigham Young's eldest daughter—an actress. Herself and her two sisters are married to H. B. Clawson.)

# CHAPTER XXXIV.

## MORMONISM AND THE MORMONS.

**Population and religions of the world—Christianity—Mohammedanism—Buddhism—Judaism—Mormonism: its rise, progress, history, and practices—Joseph the prophet and his followers—The *golden plates* from the hill Cumorah—Christ in America—Mormon and Moroni—John the Baptist ordains Joseph Smith—Smith's birth, early history, life, adventures, and death—Polygamy—Brigham Young: his birth, history, and career—Desertion of Nauvoo—Mormons march westward—Settle at Salt lake—Their city, religion, society, and practices—Despotism in Utah—Mormon godhead.**

In considering the peculiar religious tenets of the only organized religious body claiming to be Christian which still practices, as a part of its faith, polygamy, and holds a distinct revelation from God to its prophet, it is well to briefly review the several religious divisions of the earth, and the leading organized religions of the world.

The population of the globe is in round numbers about 1,381,000,000, divided as follows: 380,000,000 Caucasians, 200,000,000 Ethiopians, 220,000,000 Malays 1,000,000 American Indians, and 580,000,000 Mongolians.

All these people speak 3,064 languages and practice 1,000 different religions, which may be classed into six general divisions, within which all the other creeds and denominations exist. These general divisions of course convey but an imperfect idea of the religious faith of the several divisions of the globe, as the reader may judge from the fact that all European countries and America are classed as *Christian;* but the division will at least form a general estimate without going into complicated details of enumeration. The six great religious organizations represent the population of the world as follows: Christians, 388,600,000; Pagans, 200,000,000; Mohammedans, 165,400,000; Jews, 7,000,000; and Buddhists and other Asiatic religions, 620,000,000, or almost one-half of the population of the whole globe.

The countries in which Christianity is the prevailing religion are Europe, America, Australia, some of the Polynesian islands, that part of Russia in Asia, and a few minor places.

Before the discovery of Japan by Pinto, in 1542, it had passed through many religious forms. As early as 1549, Xavier, the great apostle of Catholicism, was received by the Prince of Satsuma into the empire, and he and his successors had, up to 1584, converted to the Christian faith 1,800,000 Japanese, and had 200 priests established in the country, all of whom were subsequently, by edicts of banishment, driven from the empire; since which time no trace of Christianity has existed in the land until the year 1872, when an imperial decree abolished the edicts against Christianity, some of which had been strictly enforced for more than three centuries. The royal edicts of 1872, ordering the Buddhist priests to learn trades or enter the army, under pains and penalties for disobedience, exhibit a practical turn of mind in the Mikado and his progressive advisers.

Mohammedanism prevails in Turkey, Persia, Afghanistan, Morocco, Egypt, Tunis, Tripoli, and numerous interior States.

Buddhism, the prevailing religion of China and Japan, (modified and changed in some places,) extends over

India, Farther India, China, Japan, Burmah, and Siam, and other portions of Asia; and the seven million Jews are "dispersed" over the globe as follows: in Germany, 478,500; Austria, 1,124,000; Great Britain, 40,000; France, 80,000; European Russia, 2,277,000; Italy, 20,200; Switzerland, 4,200; Belgium, 1,500; Netherlands, 64,000; Luxemburg, 1,500; Denmark, 4,200; Sweden, 1,000; Greece, 500; European Turkey, 70,000; Portugal, 3,000; Syria and Asiatic Turkey, 52,000; Morocco and North Africa, 610,000; Eastern Asia, 500,800; and America, 500,000.

Of the 38,555,983 people forming the population of the United States, according to the census of 1870, there are estimated to be 33,555,983 Protestants and 5,000,000 Catholics. The Catholics belong to the Romish church, and acknowledge the pope as the sovereign head of the church. The Protestants, so called, represent every conceivable religion, from believing in Christ, either as the Saviour or as a moral reformer simply, or the intensest atheism.

Throughout most parts of the world, some particular religious order is established and maintained by legal authority; as the Greek church in Russia, the Episcopal church in England, the Catholic church in Austria, Buddhism in China, and Sintooism in Japan. In America, there are no religious orders or sects maintained by authority of the government, but the republic is classed among the *Protestant* nations of the world. All persons not Catholics are supposed to be and are denominated Protestants, although this class embraces hundreds of religious orders differing almost as much from each other as do the Universalist and the Catholic from each other.

The guarantee of equal religious freedom assured to all by the federal constitution of the United States gives generous scope to the people either to practise or to organize new forms of religion; but with few exceptions, new religious enterprises have been barren of desirable results, and have failed to attract such support as would give them material strength and national or international prominence.

The four great controlling religions of the world—*Christianity*, *Mohammedanism*, *Judaism*, and *Buddhism*—had their origin in Asia and in Europe, as is claimed, under the direct control of God and visitation of angels. But whether from the fact of the turbid waters of the Atlantic not being inviting for aerial celestial flights from the Old to the New World, or that the soil of the new continent was not productive of worthy objects of "inspiration," America, with all its progress and invention, has not promulgated a religion of any great magnitude, and its people have received but few celestial visitations, and these generally of a very local and imperfect order, and generally ending in complete failure. True, the great established religious bodies have been fearfully mutilated, and limbs lopped off and new ones engrafted, but generally without change or injury to the parent body. "Warnings, visitations, and dreams" of coming events have been "foreshadowed" to "wise ones," and "visions" have proclaimed the "end of the world" to "chosen ones," who abandoned their earthly goods preparatory to their aerial flight. Trumpets have sounded to warn people of the "coming to pass" of the destruction of the race; but a few days generally found the disciples of such doctrines visiting the "groceries" for pork and beans, and their "celestial trumpets" turned into fish-horns to aid in peddling clams, or gathering old clothes and "soap-fat."

"Spiritual manifestations" have been pretty freely dispensed in America; and, besides the "appearance" of all the notables of our own country, Europe and Asia have sent us some of their choicest brands. Hannibal, Julius Cæsar, Confucius, and Napoleon have "come over the seas," and, through "mediums," given us glimpses of cool and sulphurous regions without much disturbing the equanimity of our people.

The only genuine demonstration that we have yet had in America, through the direct medium of "inspiration" and "angels," was the "revelations" made to the "prophet" Joseph Smith, the founder of *Mormonism*—the new American religion of the "Disciples of Jesus Christ of Latter-day Saints." In this new enterprise many of the necessary elements in successfully establishing religious creeds seem well defined: the obscurity, ignorance, and superstition of its founder and "prophet," and the "persecution" of its disciples.

Joseph "the prophet," vulgarly called Joseph Smith, is supposed to have come "among his people" without any mysterious disturbances of the ordered laws of nature other than attend the birth of common "sinners." His father in the flesh was a plain, medium-sized man, without education, who lived by doing odd jobs for his neighbors, telling fortunes, "finding things lost," and seeing with a "double sight." He had no visible physical marks to distinguish him from his fellow-men, save that he was rather taller than ordinary persons, had a long nose and a large mouth, and was afflicted with chronic laziness.

The mother of the "prophet," whose maiden name was Lucy Mack, is said to have belonged to the "lower order" of people. She was a simple-minded, ignorant, unlettered woman, full of superstitious notions, and believing in "signs" and dreams, and was of much service to her husband, Joseph Smith, Sr., in "divining" things. This pair had their terrestrial domicil at the little village of Sharon, Windsor county, in the State of Vermont; and here, on the 23d of December, 1805, Joseph the "prophet" was born. It is not recorded by the people of Sharon that there were any terrestrial or celestial "signs" to proclaim the advent of the "revealer of truth." The boy, at a very tender age, exhibited marked symptoms of the "talents" of his parents—ignorance, superstition, and "sight-seeing;" and soon became expert in "divining," and the use of witch-hazel in locating suitable positions for his neighbors' wells, from which occupation he acquired the title of "water-witch," in which he much delighted. It was in one of these wells, located by his "divining-rod," that he once found the "mysterious peep-stone," through which he could see all things, "past, present, and to come;" and by which he could, like his earthly progenitor, "find things lost." Indeed, the boy seemed to have absorbed the whole of the varied "talents" of his parents, as the rest of the family seem to be only like other poor, ignorant people.

In the year 1815, when Joseph was ten years of age, the family with the young "prophet" settled in Wayne county, near the village of Palmyra, in the State of New York, where they remained for ten years. At the end of this period the "prophet" was twenty years of age, and had considerably developed his "talent" as "water-witch" and "sight-seer," and "revealing" the location of "lost, strayed, or stolen" cattle or goods, and the "buried treasures of the pirates," in all of which he spent much of his time when not employed in hewing wood and drawing water, or feeding the hogs and stock of his neighbors, at a monthly stipend of six dollars.

On leaving Wayne county, the "Smith family" moved to the adjoining county of Ontario, taking up their abode near Manchester.

It is reported by Joseph that, at the tender years of sixteen, he had a "visitation," warning him of the danger of his losing his soul, and of the ungodly character of the organized religious institutions of his time; and that while at prayer "in the bush" at the rear of the paternal mansion, in Ontario county, a celestial pyrotechnic display illuminated the forest and "the person of the prophet," and in a "vision" he saw two angels, who brought unto him the glad news of the forgiveness of his sins, and that he was chosen by God to reveal the "true religion" and dispel all existing sects. On the 23d of September, 1823, the prayers of Joseph brought him another visit from angels, and renewed assurance of heavenly powers, and finally "revealing" to him that his hand should draw forth from "the hill Cumorah" the *plates of gold* whereon were inscribed, in a language known only to himself, the gospel of the true God.

On the 22d of September, 1826, in the midst of angels and revolting devils, "with a mighty display of celestial machinery," Joseph, unaccompanied, save by the "messengers," extracted from the hill Cumorah, near Manchester, the domicil of his parents in Ontario county, New York, a "mysterious box, containing golden plates of the thickness of tin, bound together like a book, fastened at one side by three rings, which run through the whole, forming a volume about six inches thick," upon which was engraved, in "reformed Egyptian, the language of the Jews and the writings of the Egyptians." The box also contained four precious stones, "transparent and clear as crystal—the *Urim* and *Thummim* used by seers in ancient times—the instruments of revelations of things distant, past, and future."

From these golden plates Joseph, by inspiration, translated the "Book of Mormon," the Bible of the Mormons, which was first published in 1830 by Pomeroy Tucker, of Ontario county, New York. The divine authenticity of the work being doubted by "unbelievers," the Lord sent living witnesses in the persons of three "disciples"—David Whitmer, an obscure, simple man, Martin Harris, a superstitious neighbor of the young "prophet," and Oliver Cowdery, an itinerant scribe, who aided Joseph in the translation—all of whom make the solemn declaration attached to the printed copies of the "Book of Mormon," as follows:

> "We have seen the plates which contain the records. They were translated by the gift and power of God, for His voice hath declared it unto us, wherefore we know of a surety that the work is true; and we declare, with words of soberness, that an angel of God came down from heaven, and brought and laid before our eyes, that we beheld and saw the plates and the engravings thereon."

Other disciples of the "prophet" followed with evidence of the "divine origin" of the *plates*. Among these testifying were three of the Smith family, besides a number of the immediate friends and neighbors of Joseph. They certify:

> "Joseph Smith, the translator, has shown us the plates of which hath been spoken, which had the appearance of gold; and as many of the plates as the said Smith had translated we did handle with our hands; and also saw the engravings thereon; all of which had the appearance of ancient work and curious workmanship."

The account given of the origin of the golden plates, and the necessity of their discovery, as given by Smith, together with the "evidence" of those who "saw" the plates, is doubtless sufficient evidence to establish, in the minds of many, the "divine origin" of the "Book of Mormon;" and however shallow and absurd it may be, it must be acknowledged that it is but little more absurd and unnatural than the basis upon which thousands, if not millions, of the race found their faith.

The prophet Joseph says that, about six hundred years before Christ, God warned a band of Israelites at Jerusalem of approaching captivity and destruction, and directed them eastward to seek the "promised land;" that when at the sea, Nephi, the leader of the band, was directed by angels to build a craft, upon which a "double ball and spindle" were attached, in which the Israelites set sail for the west, and landed all safe in Central America, (Columbus had not yet started his ships toward the new world.) After spending some time in South America, where they "multiplied," a vicious Jew of the name of Laman got up a conspiracy against the "priesthood," for which all hands, priests, and all, were "cursed" and doomed henceforth "to be a brutish and a savage people, having dark skins, compelled to dig in the ground for roots, and hunt their meat in the forests like beasts of prey." It, however, was prophesied that God would eventually rescue a portion of the tribe, who should "have the curse removed, and become a fair and delightsome people," who, in coming time, should "blossom as the rose under the teachings of the Latter-day Saints." The party upon whom the "curse" remained were the followers of Laman, called the Lamanites, from whom sprang the American Indians; and from the party having the curse *removed* came the Nephites, called after Nephi, their first ruler. Alma, Kish, Noah, and others had ruled these people, who, like the Lamanites, had spread over the whole American continent, built cities, and carried on protracted wars in which hundreds of thousands were slain. Local disorders, caused by "false prophets," had long disturbed the composure of the Nephites, who had become numerous and powerful, holding complete dominion of a great part of interior America; finally powerful bands from the Rocky mountains came down and drove the Nephites east, to the waters of Lake Erie, where a vigorous stand was made, in which the Nephites were worsted.

After the crucifixion of Christ at Jerusalem, he came over to America, and dispensed his gospel to the tribes of the "lost children of Israel," making many converts among the Nephites. But the new disciples were doomed to defeat and annihilation; from the north came down the famous mountain chief, Onandagus, and "covered the whole land with dead bodies."

The fierce Lamanites with the "curse" on them were still in rebellion, and after pushing the Nephites from the mountains, across the Mississippi, and beyond the lakes, finally surrounded them in Ontario county, New York, where, in the year of our Lord 430, at the hill Cumorah, two hundred and thirty thousand of the Christian Nephites lay slain. *Mormon*, and his son

Moroni, of all this once powerful nation, remained. By these the history of their extinct race was perpetuated. Mormon having added an account of his departed people, and being assured by angels from heaven that in lapse of time the hand of a prophet should restore the record to the world, took the sacred volume and delivered it into the hands of his son Moroni, who, in obedience to his father's injunction, buried it in the hill Cumorah, which is in the county of Ontario, in the State of New York, from whence, on the 22d day of September, 1826, according to prophecy, they were brought forth by the hand of "Joseph the prophet."

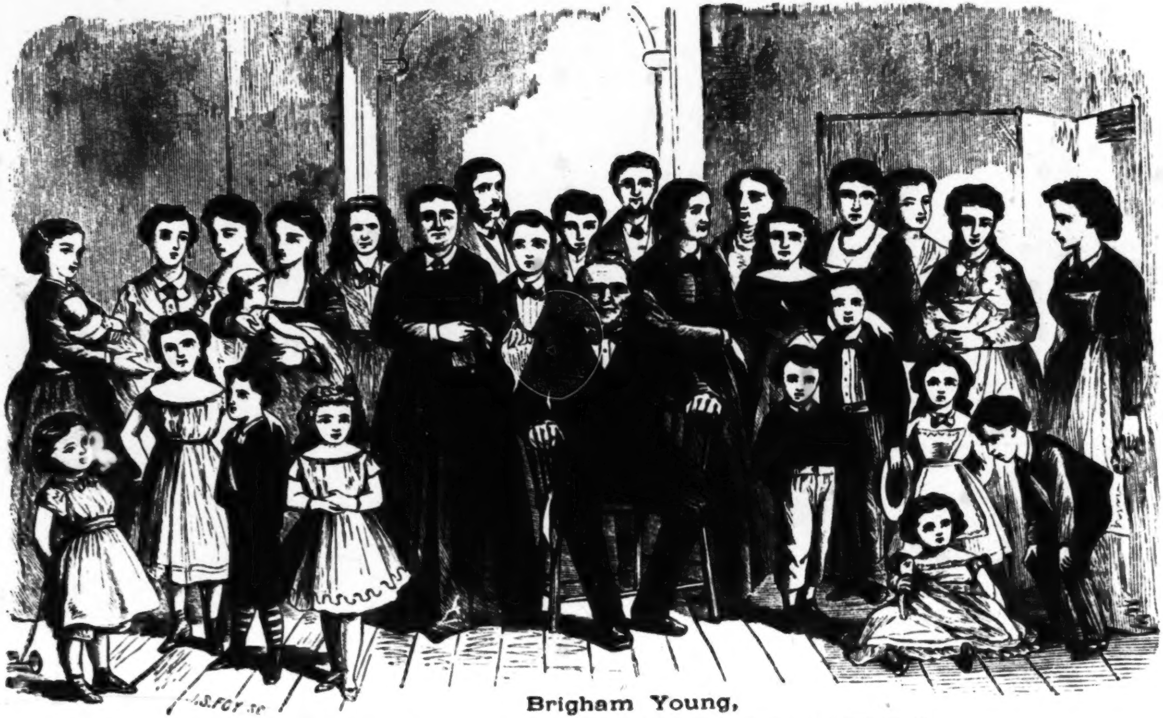
This is the record left by Joseph Smith of the origin of the new religion of "the Church of Jesus Christ of Latter-day Saints," of which he was the founder. The sect and their book take their names from the preserver of the records of the Christian Nephites, Mormon, whose volume, "The Book of Mormon," as translated by Joseph, was first given to the world from the press of a newspaper office in Ontario county, New York, in 1830.

In denial of the *divine origin* of the Book of Mormon, it is stated that, in 1812, the Rev. Solomon Spaulding, a Presbyterian minister, who from failing health had left his profession, had written a romance called the "*Manuscript Found*," having its principal scenes laid in the history of the Indian tribes of the interior of America. The manuscript Mr. Spaulding endeavored to have printed by Mr. Patterson, of Pittsburg, Pennsylvania, and others, desiring it to be prefaced as deciphered from plates dug from the earth in Ohio. But failing in this, the manuscript was left in the hands of Mr. Patterson, who kept a printing office, in which Sidney Rigdon, one of the "founders of the faith," was employed. Patterson died in 1826, but the manuscript was never after seen by any of his friends.

Mrs. Spaulding, the widow of the author of "*Manuscript Found*," avers that she had a complete copy of her husband's book in manuscript; and, in 1825, while residing in Ontario county, New York, that Joe Smith was digging a well for a Mr. Stroud, who lived next door to her, and that her copy of the book disappeared from her trunk.

When the "Book of Mormon" appeared, the relatives of Patterson, the printer, and Mrs. Spaulding and her relatives recognized the latter as an interpolation of "*Manuscript Found*," and published all the facts; only, however, to draw from Smith, Rigdon, and their followers cries of "persecution."

Mormonism was being promulgated as early as the 15th of May, 1829. John the Baptist appeared among the disciples and ordained Joseph Smith and Oliver Cowdery in the Aaronic priesthood, and on the 6th of April, 1830, near the town of Manchester, the home of the prophet, the "Mormon church" was organized with the friends and family of Joseph, six in all, consisting of Joseph Smith, his father Joseph, senior, Samuel Smith, Hyrum Smith, Joseph Knight, and Oliver Cowdery. The laying on of hands "for the gift of the Holy Ghost" followed the sacrament, which had been partaken of by all, and on the 11th of April, 1830, the first Mormon sermon was preached by Oliver Cowdery, soon after followed by a "miracle," and a first "conference" on June 1st following. The wife of the prophet



Brigham Young,

HEAD OF THE MORMON CHURCH, AND A PORTION OF HIS WIVES AND CHILDREN.

Joseph was, by special revelation, proclaimed "Elect Lady and Daughter of God."

Soon acquisitions to the "revealed truth" from all sides poured in, and zealous preachers were sent among the Gentiles and Lamanites to tell them of the fulfilment of the prophecy.

At first, the "doctrines" of the church were not very definite; any views suited to attract superstitious, simple-minded persons, seeking for "signs," "wonders," and "revelations" were acceptable. The "destruction of the world" was very effective in drawing timid women and semi-idiotic men into the circle of the "saints."

Joseph Smith soon assumed absolute control of the Mormon church, not alone from the fact that he had been "inspired by God to reveal the truth," but that he was endowed with the spirit of prophecy, and by "revelation" was to direct the spiritual and temporal affairs of "his people." So step by step during the life of Smith, and through the reign of Brigham Young, the affairs of the Mormon church and people have been directed by "revelation."

During the latter part of 1830 and the early part of 1831, nearly all the saints had departed from New York State and settled at Kirtland, Ohio, proselyting on their journey west.

In June, 1831, Joseph Smith, with a few chosen elders, were on the march to "Zion, which should never be moved," as Joseph had a revelation that Jackson county, Missouri, had been "solemnly dedicated to the Lord and His saints," and here they began to establish themselves. The early converts, including the Smiths and friends, were "dispensing the gospel," while Joseph

Smith and Sidney Rigdon opened a bank, which soon failed. Among other active missionaries in the field was Samuel H. Smith, the brother of Joseph, whose ministrations "brought to the fold" the grandest apostle of them all in the person of Brigham Young, "Prophet, Priest, Seer, Revealer in all the world; first President and Trustee-in-trust of the Church of Jesus Christ of Latter-day Saints," and late Governor of the Territory of Utah; who, with his four brothers and six sisters, all embraced the new religion.

The State of Vermont, the birthplace of Joseph Smith, also produced the great polygamist Brigham Young, who was born at Whittingham, Windham county, in that State, on the 1st of June, 1801. Brigham, who was raised on a farm, had at an early age learned the painting and glazing business, which he followed until the rich field of Mormonism opened for his splendid talents as a ruler.

With the growth of Mormonism, its leaders became bold and defiant, proclaiming themselves kings and rulers, before whom all others must bow, and that eventually they would drive all "disbelievers" out of the country.

So violent and intemperate had become the leaders of the new religion, and so obnoxious had they rendered themselves to the people of Missouri, that, in the summer of 1833, the inhabitants assembled at Independence, the head-quarters of the Mormons, destroyed their newspaper office, whipped, tarred and feathered some of the leaders, and after serious conflicts, in which some of the populace were slain in a hand-to-hand conflict, the Mormons retreated, evacuated Jackson county, and headed west; and, on the nights of

November 4 and 5, crossed the Missouri river into Clay county. After a brief sojourn at Liberty, Clay county, Missouri, in May, 1836, on warning of the people "to leave," they evacuated Clay county, and located in the counties of Davis, Carroll, and Caldwell. The organization at Kirtland, Ohio, was still maintained. Joseph had marched with an army into Missouri to avenge the wrongs of his people, but the cholera overtook the prophet and his soldiers, and drove them from the field. Meantime Smith had finished an "inspired translation" of the Old Testament; Brigham had received the "gift of tongues," and he and Heber C. Kimball, and others of "the twelve apostles," in 1835, started from Kirtland on their missionary labors, adopting the name of "Latter-day Saints," as the world was soon to be destroyed, and they would be the last saints of earth. Continuous conflicts between the saints and people of Missouri kept several counties of the State in war, and the disorders of dissenting saints kept the leaders in endless confusion and dread. As early as June, foreign missions were organized, and Orson Hyde, H. C. Kimball, and W. Richards sent to England, where many converts were made.

The seat of Mormonism was in confusion. Multiplied crimes caused Governor Boggs to issue an order of banishment of the saints out of the State, "even if it was necessary to exterminate them." Smith and Rigdon were flying from the angry creditors of their decayed bank, and Brigham Young, for participation in evils, was heading for Quincy, Illinois. Armed bands of Mormons were in the field, and the State militia of Missouri, under the call of the governor, had met and defeated the saints, and after their leaders had been held to trial "for treason, murder, robbery, arson, and larceny," the whole Mormon community in Missouri, numbering more than twelve thousand, now headed for Illinois, and in January, 1839, settled at Quincy, Adams county, and other parts of the State. By this time the "persecutions" of the Mormons gained them much sympathy as they wandered west, and, either through negligence or the desire of the people of Missouri to be relieved as easily as possible of the Mormon prisoners, Smith and his associates escaped from their guards, and headed for Illinois; and he and his people, on the 11th of June, 1839, laid the foundations of their famous city of Nauvoo, in Hancock county, wherein great activity and zeal were manifested. A thriving city rose as if by magic, missionaries issued in every direction, and Brigham Young, as "president of the twelve apostles," had, in April, 1840, arrived in England, where great success attended the missionary efforts of "Latter-day Saints," who, early in the year 1841, led to their "Zion" in the wilderness nearly eight hundred English converts to the "faith." On October 3, 1840, the foundations of the great temple, which Joseph had spiritual command to erect, were laid, and Nauvoo attained an important position, and the "prophet" and his disciples assumed spiritual and temporal supervision of all with whom they came in contact, proclaiming the speedy conversion of the whole world to the "revealed religion of Mormon."

The new religion and its followers, however, were doomed to further "persecution for the Lord's sake." The liberties of the saints had drawn to their circle hundreds of designing, vicious, and cunning rascals, who, playing upon the weak minds of the enthusiastic converts, led them into all manner of excesses and crimes against the "Gentiles," who finally, dreading the political influence of the sect, and the power of the "Nauvoo legion," rose and drove them from the land.

The prophet had, in 1844, nominated himself for the Presidency of the United States, and his people had placed him as lieutenant-general at the head of the "Nauvoo legion." Courts and all local authority were controlled by the Mormons, and a political and social war waged against the "Gentiles;" new orders of priestly functions and nobility were established, ending in the crowning and anointing of Joseph as king and high priest, and claiming his direct descent from Joseph, the son of Jacob.

Plurality of wives had gradually crept into the order at Nauvoo, and Joseph and his elders reaped a rich harvest of *spiritual* wives from the fairest doves of their flocks.

The final end of the prophet of the "revealed truth" was at hand. A number of Mormons, including Smith, had, on the 24th of June, 1844, been arrested, and were held in jail at Carthage, near Nauvoo. Soon, however, all except Joseph Smith and his brother, Hyrum, were released, but their offences appearing great they were held in custody. The political and military power of the Mormons had now become so great in the city of Nauvoo and vicinity, and their crimes so appalling, that the people had determined to take the law into their own hands, and avenge themselves. The most effective way to accomplish this, and to insure future security, they thought, was to strike at the fountain-head; so the life of the prophet must atone the wrongs of his people. A band of citizens, disguised and armed, had entered into a conspiracy with the guard, so that easy access was had to the jail. About six o'clock on the morning of the 27th of June, 1844, this band forced open the prison doors, shot and killed Hyrum Smith instantly. Joseph, who was armed with a pistol, bravely defended himself, ascended to the upper part of the jail, and sprang from the window to the ground, receiving stunning injuries, and in his helpless condition was brutally murdered by being riddled by the balls from the guns of his assassins.

Thus fell the great American prophet at the early age of thirty-nine years, full of spiritual and muscular strength, fair and comely, erect in his six feet of manly beauty—the proud commander of his sect and the admired of his "sisters in the Lord."

The death of Joseph spread a pall of mourning over Nauvoo: the wives and people of the "founder of the faith" joined in sending lamentations to heaven for the slain king, upon whose head they placed the martyr's crown dyed in the blood of sacrifice.

On the death of the prophet dissensions sprang up among his people, and the church and saints looked for "signs" of a leader. Joseph had a son named after himself, but it was said by the prophet that "the man was not born who was to lead this people."

Many of the "saints" had revelations of special missions and authority to succeed Joseph, but to no purpose.

Brigham Young, who was at the head of the twelve apostles, at once took a leading position, and on the 15th of August, 1844, an "encyclical letter to all the saints in the world" was issued by himself and his apostles. On the 7th of October, a general council of the Mormons at Nauvoo decided to leave the government of the "church" with the "college of the twelve apostles," at the head of which was Brigham Young. From this period dates the rule of the man who built up Nauvoo until it spread over an area of six square miles, with its magnificent temple, costing over a million dollars, and its *fifteen thousand saints.*

Continued conflicts between the Mormons and the Gentiles, with charges of murder, arson, counterfeiting, and other crimes, aroused the people of Illinois; and, warned by an approaching general uprising to exterminate them, the whole Mormon people commenced the evacuation of their city and temple, and, bidding adieu to Nauvoo, in the winter of 1845–6, headed by Brigham Young and his fellow-apostles, turned their faces toward the great desert, in the direction of the setting sun. Fifteen thousand men, women, and children, with their sluggish ox-teams, numbering many thousands, plunged into the dead of winter, experiencing untold miseries, privations, and death, wended their tedious journey over the precipitous mountains and arid plains, leaving the new-made graves of their fellows to mark their sad pilgrimage beyond the reach of persecution.

The Mormon leaders had no settled views of a permanent location, further than that in some quarter of the Pacific coast they might find refuge from Gentile intolerance. Oregon, Vancouver island, the Sandwich islands, and the Spanish Territory of California were all looked to as suitable fields of retreat; and, in the hope of reaching the latter Territory, five hundred Mormons joined the expedition of General Kearney, which left Fort Leavenworth, on the Missouri, in June, 1846, marching by way of Santa Fé, New Mexico, and the Gila, until it reached the coast of California. Many of these people finally settled in California; and on the discovery of gold, in 1848, abandoned San Francisco and the lower country and went to the mines.

In 1845, and while California was yet a Spanish colony, an expedition of saints was fitted out, and sailed in due time from the city of New York on board the ship *Brooklyn.* She made the voyage safely round Cape Horn, and first visited the Sandwich islands; and finally, on the 31st of July, 1846, (twenty-four days after Commodore Sloat had hoisted the American flag over California,) entered the Bay of San Francisco, where the Mormons pitched their tents on the adjacent sand-hills, and, under the leadership of Samuel Brannan, a shrewd Maine Yankee, maintained an organization until the discovery of gold, in 1848; when the consequent fever infesting the whole camp, the saints, leader and all, started for the mines. This broke up the design of permanent settlement on the Pacific shores, west of the Sierras.

During this period, the main body of the Mormons had collected near Omaha, where, under the executive talent of their new leader, they had consolidated their strength, and the people unanimously proclaimed that "the mantle of the prophet Joseph had fallen on the seer and revelator, Brigham Young."

The object of the saints now was to reach the Pacific and join their brethren gone before them by sea. President Young accordingly, at the head of the pioneer pilgrims, consisting of one hundred and forty-three men, with seventy wagons, left Omaha, on the 14th of April, 1847; and, after a three months journey across the

FINGER ROCK, WEBER CANON, UTAH

trackless desert, on the 24th of July following, entered the valley of Great Salt lake. Here the saints pitched their tents, fully believing that in this most secluded and unfrequented region of the continent they might live unmolested for centuries. But the discovery of gold in California, in 1848, led the people of the East across the plains in vast numbers; and the trail of the pioneer saints to their Jordan and Zion in the desert was made the highway of the vast emigrant trains and bands of gold-hunters, and Salt lake became the best known section of America west of the Missouri.

The acquisition of California brought the Territory of Utah, then a part of California, under the dominion of the United States; a fact which the saints have been loath to learn, as from their first settlement they have had absolute social, religious, and political control of the country, in utter defiance of federal laws and the national constitution.

As early as the 5th of March, 1849, the Mormon leaders assumed sovereign dominion over their "Zion," by the meeting of a convention at Salt Lake City "of all the citizens of that portion of Upper California lying east of the Sierra Nevada mountains, to take into consideration the propriety of organizing a territorial or State government." The convention established the "free and independent *State of Deseret*," elected State officers, and finally applied to Congress for admission as a State into the Union. Congress declined, however, to admit the new State; but, on September 9, 1850, organized the Territory of Utah, President Fillmore appointing Brigham Young governor. From that period forward national authority has been completely ignored by the Mormons, until the years 1871–2, when the federal territorial officers, for the first time in the history of the Territory, seemed to comprehend that Utah was not a foreign nation, but was subject to the authority and laws of the United States.

During the rebellion of 1861–5, active measures were adopted by the Mormon leaders, looking to the separation of Utah from the jurisdiction of the United States, and the establishing of an independent government; while not a man, dollar, nor sign of interest or sympathy was offered to the national government. Repeated efforts, from time to time, have been made to induce the Federal Congress to admit Utah as a State, the last time being on the 18th of March, 1872, when an election was held, a constitution adopted, United States Senators elected, and the "State of Deseret" once more sought in vain admission into the Union. At the election in March, 1872, all the women in the Territory over twenty-one years of age, regardless of birthplace or nationality, voted. The Gentile population being so small a minority, did not offer any opposition, nor vote at this election.

Brigham Young, who had ruled as a despot at the head of the Mormon church, had, by federal appointment, held the office of territorial governor from 1850 until the early part of 1858, when he was succeeded by Governor Cumming, who, with Colonel Albert Sidney Johnston, (late of the Confederate army,) led James Buchanan's "army of invasion" into Utah to quell the "Mormon rebellion," which had driven the federal officers from the Territory, and, under the leadership of Governor Brigham Young, had assumed alarming proportions; and drew from the Mormon chief his famous edict, addressed to the commander of the federal forces sent into the Territory to enforce order:

GOVERNOR'S OFFICE, UTAH TERRITORY,
GREAT SALT LAKE CITY, *September* 29, 1857.

SIR: By reference to the act of Congress passed September 9, 1850, organizing the Territory of Utah, published in a copy of the Laws of Utah, herewith, p. 146, chap. 7, you will find the following:

SEC. 2. *And be it further enacted,* That the executive power in and over said Territory of Utah shall be vested in a governor, who shall hold his office for four years, *and until his successor shall be appointed and qualified,* unless sooner removed by the President of the United States. The governor shall reside within said Territory, shall be commander-in-chief of the militia thereof, &c., &c.

I am still the Governor, and Superintendent of Indian Affairs for this Territory, no successor having been appointed and qualified, as provided by law, nor have I been removed by the President of the United States.

By virtue of the authority thus vested in me, I have issued and forwarded you a copy of my proclamation forbidding the entrance of armed forces into this Territory. This you have disregarded. I now further direct that you retire forthwith from the Territory by the same route you entered. Should you deem this impracticable, and prefer to remain until spring in the vicinity of your present encampment, Black's Fork or Green river, you can do so in peace, and unmolested, on condition that you deposit your arms and ammunition with Lewis Robinson, Quarter-master General of the Territory, and leave in the spring as soon as the condition of the roads will permit you to march. And should you fall short of provisions, they can be furnished you by making the proper application therefor.

General D. H. Wells will forward this, and receive any communication you may have to make.

Very respectfully,

BRIGHAM YOUNG,
*Governor, and Superintendent of Indian Affairs, Utah Territory.*

*To the Officer commanding the Forces*
*Now invading Utah Territory.*

The army still marched toward the city of the saints, causing a general "scare," and a stampede of one-half of the Mormon population toward the Colorado and Mexico. Finally, "peace commissioners" were appointed, the "war" ended, and the Mormons returned to their city.

Passing through various phases of social local disturbance of church and State, and continuously opposing the authority of the national government, the Mormons have found themselves surrounded by an increasing population from all quarters of the republic, induced by recent railroad communication, curiosity, and the development of rich silver and other mines in the Territory. Until within a recent period the temporal and spiritual power of the American prophet and his people are fast running below zero; and eventually must be frozen out in the pure atmosphere that chills concubinage and the incestuous pollutions of marriage to whole families.

The Mormon leaders, dreading the influx of Gentiles, and the consequent danger to their long sway of political power, in 1870, resorted to the expedient of female suffrage; and, by territorial enactment, at a single dash, added *fifteen thousand* to the Mormon "cause." By this law, every woman in the Territory, over twenty-one years of age, and all under that age, if married, vote at all elections. No naturalization laws of the nation are applied to those women, three-quarters of whom are ignorant, superstitious foreigners. This is the only quarter of the republic enjoying (?) female suffrage; and the spectacle of the polygamists on election day opening the doors of their harems and marching their wives to the polls is a strange contradiction and perversion of liberty. Brigham casts seventeen votes—his sixteen living wives and his own, to say nothing of the control over his "*interesting family.*"

In 1852, to check the "licentious cohabitation" of anti-Mormons and the "lewd men of California," who sometimes found their way to the harems of the saints, a law was enacted by the territorial Legislature of Utah, with severe pains and penalties for "lewd and lascivious cohabitation." These statutes have now been made to recoil against those who enacted them, suits having been commenced before the United States territorial judges by oppressed Mormon women against their truant lords, for over-indulgence in "wives;" and even Brigham, who, as Governor of the Territory, signed the law to keep the unrighteous feet of the invading Gentile from his domicile, found himself indicted by a grand jury and held in bonds to appear for trial, for the crime of "*lewd and lascivious cohabitation.*" Doubtless the prophet thought this a new "revelation."

The Gentiles (all those who are not Mormons) in the Territory hold that all marriages with Mormons and their women are void, except with their first living wife; while the Mormons hold that they are supported by the Christians' Bible itself in polygamy; that marriage is a *sacrament*, the regulation of which is solely with the "church;" that they can have as many wives as they please, when their "religion" directs them; that *the church alone can marry and divorce;* and that all acts of courts in these matters are usurpations, tyrannical and void.

Trouble continued to accumulate with the saints in 1870–1. The mystic circle of the "holy twelve apostles" had been broken by the rude hand of the

United States territorial marshal; Brigham and apostle Daniel H. Wells had been arrested and held in bonds for trial for "raising a family," under indictments for lasciviousness; and the murderous Bill Hickman came forth from his mountain retreat, "unbosomed" himself to the federal territorial officers, disclosing the participation of Brigham Young and his saints in the most revolting crimes and murders, revealing a sickening record of individual assassinations, and ending with the avowal that the direct orders of Brigham Young preceded almost every murder of the terrible list of slain in Utah; and that the Mountain Meadows massacre, where *one hundred and thirty-two* innocent immigrants —men, women, and children—were cruelly butchered in 1858, in Southern Utah, was by the authority of Young and his "apostles." On these confessions, and other charges of crime by numerous witnesses, Brigham Young, Daniel H. Wells, Orson Hyde, Hosea Stout, and William Kimball, all saints, were accused. Some were arrested, while others fled, and Brigham, who had been held in heavy bonds to appear in court on charges of murder, fled to Southern Utah, but finally returned to Salt Lake City, where he was arrested early in 1872, and cast into prison to await his trial.

The case of Young and his associates was, on appeal upon the irregularity and want of jurisdiction of the federal territorial court, carried to the Supreme Court of the United States, which held that the manner of drawing juries by the territorial courts from September 20, 1870, to April, 1872, was illegal. By this decision, on the 25th of April, 1872, Brigham Young and four hundred other prisoners, including twenty-four charged with murder, were released. This event was the signal for new vows, and faith in the Divine interposition to release his saints and humiliate their persecutors. At the great annual conference held at Salt Lake City at this period more than twelve thousand disciples swelled the chorus in the great tabernacle, proclaiming the victory of God and his saints, and giving new inspiration to the elders and bishops, a new batch of whom were despatched "with glad tidings" to the people of Europe.

The social practices and religious dogmas of the Mormons are almost as romantic, singular, and ridiculous as the crimes of which they are accused are atrocious and appalling. They claim to be Christians, but assert that all other Christian organizations have departed from the "true doctrine," having scarcely grace enough to become good Mormons, while the disciples of Joseph the prophet shall eventually, by the grace of God, subdue the whole races of men, lead them to salvation, and eventually rule over them as gods and kings in the land of their inheritance in the skies. The *Bible* they hold as the foundation of all their faith, giving it a literal interpretation; but that the *Book of Mormon*, translated from the golden plates by their prophet, is an infallible and indispensable key to the mysteries of revelation and the kingdom of heaven. Souls, they say, existed from all time, and in invisible bodies float in vacancy, are caught by angels, and finally, from the cradles of the harems of the saints, are sent out in tangible form as live Mormons to fulfil the Scriptures by multiplication and conversion of the "heathen," which is the highest mission of the saints and the especial business of the Mormon women; for if, by missionary labors, a Mormon convert a dozen

Gentiles, how much "glory must surround his head in the presence of his many wives and his many children." Surely here is a "gathering of spirits."

In the eternity they hold there are many worlds and many gods, and that each world has a head god, and a son next in command, but that over all is one chief, who is the father of all the little gods; and that he, too, "is the father of Jesus Christ in the only way known in nature, just as John Smith, senior, is the father of John Smith, junior."

The theory of creation and of the Garden of Eden, as well as Darwin's "Descent of Man," giving the origin of our ancestors in oysters, slugs, and apes, are all rejected by the saints, who claim that "when the earth was prepared, there came from an upper world a son of God, with his beloved *spouse*, and thus a colony from heaven, it may be from the sun, was transplanted on our soil." This theory is synonymous with the view recently promulgated by the learned professor in Edinburgh, Scotland, who declares that there are no germs of human creative life on our globe, and that, after "careful study of the subject of creation and the race," he concludes that our ancestors came from some of the globes above us, and made their terrestrial descent upon an *areolite.* It is not mentioned whether other emigrants are to follow, or whether the sudden contact of the metal aerial horse with the earth gave the riders a vivid and unpleasant realization of terra firma. Doubtless the Mormon theory is as correct as any other version of this subject, and any of the others are as correct as that of the Mormon view.

Mormons and the few others who may reach heaven are to appear "in the flesh," and, surrounded by their

VIEW OF GREAT SALT LAKE, AND THE MORMON CITY OF OGDEN.

(From an observation car, Central Pacific Railroad.)

*wives* and children, sing perpetually to their prophet. Baptism by immersion is a sacrament. Brigham himself has been twice in the "plunge," and the sins of all converts are *floated* on the "waters of regeneration;" and upon the appearance of an influx of Gentile immigrants, lascivious men from California, or grasshoppers, all saints that are considered "shaky" get a dip.

The composition and order of the "godhead" are Eloheim, Jehovah, Adam, Christ, and Joseph Smith. From this "head centre" issue the inspirational light that led the saints from New York to Nauvoo, and thence to the "promised land" in the vicinity of Great Salt lake.

A plentiful supply of *prophecy, power of the Holy Ghost, inspiration, gospels, signs, wonders, mystic powers, visions, faith, atonement, regeneration, spirits, angels, saints, revelations, testimony, healing by laying on of hands, anointments, holy oils, patriarchs, remissions, bishops, teachers, evangelists, purgations, ascensions, descensions, dreams, callings, priesthoods, sacraments, orders, progressions, gifts of tongues, consecrations, and miracles* are woven through the doctrines of the Mormon faith to render it palatable to the most visionary of mortals, while the practical workings of polygamy have strong attractions for the more materialistic. Christ, the Mormons say, was but a man as others, having in his brief lifetime set his followers the injunction of *multiplication* by having five wives himself, among whom were Mary and Martha.

Polygamy at first was not a part of the Mormon faith. Joseph did not find any revelation of its necessity on the golden plates, and in the *Book of Mormon* such a practice is fiercely denounced. In the second chapter of the work is found a warning to the Nephites:

> "But the word of God burdens me because of your grosser crimes. For this people begin to wax in iniquity; they understand not the Scriptures, for they seek to excuse themselves in committing whoredoms because of the things that were written concerning David and Solomon, his son. They, truly, had many wives and concubines, which thing was abominable before me, saith the Lord. Wherefore, hearken unto the word of the Lord, for there shall not any man among you have save it be one wife, and concubines he shall have none; for I, the Lord God, delighteth in the chastity of woman."

With the Mormons, as with other mortals, even *prophecies* and *revelations* are controlled or altered by circumstances; so, while at Nauvoo, the increase of beautiful young women so inspired Joseph, Brigham, and other saints, that a *new* revelation was deemed necessary. The prophet sought it and it came, fully denying the injunction in the *Book of Mormon*, and going back to the harems of "the servants of the Lord" for a justification of concubinage and incest. Joseph received the *new* revelation at Nauvoo, on the 12th of July, 1843; and in the *Deseret News extra*, of the 14th of September, 1852, at Salt Lake City, it was first publicly proclaimed to the "people;" the bishops and elders having first selected the *fairest* of their flocks for their own use.

The "revelation" in part reads:

> "Verily, thus saith the Lord unto you, my servant Joseph, that inasmuch as you have inquired at my hands to know wherein I, the Lord, justified my servants, Abraham, Isaac, and Jacob, as also Moses, David, and Solomon, my servants, as touching the principle and doctrine of their having many wives and concubines; behold and lo, I am the Lord, and will answer thee as touching this matter."

> "And again, as pertaining to the law of the priesthood, if any man espouse a virgin and desires to espouse another, and the first give her consent, and if he espouse the second and they are virgins and have vowed to no other man, then is he justified; he cannot commit adultery, for they are given unto him; for he cannot commit adultery with that that belongeth unto him and to none else: and if he have ten virgins given unto him by this law, he cannot commit adultery, for they belong to him and are given unto him; therefore is he justified. They are given unto him to multiply and replenish the earth according to my commandment, and to fulfil the promise which was given by my Father before the foundation of the world, and for their exaltation in the eternal worlds, that they may bear the souls of men, for herein is the work of my Father continued that he may be glorified."

Emma Smith, the wife of Joseph, is commanded, under dire penalties from the Lord, to receive kindly to her bosom all the wives that Joseph may have *given unto him*, and the Mormon women generally are advised of God's impending wrath if they reject the wife-offerings he gives to his saints; and to fully provide against emergencies and be ready for any change that may be desirable, the *spirit* tells the prophet of further revelations, concluding:

> "And now, as pertaining unto this law, verily, verily, I say unto you, I will reveal more unto you hereafter; therefore, let this suffice for the present. Behold, I am Alpha and Omega. Amen!"

In the "new revelation," provision is made for "spiritual wives" for the saints, so that the "apostles," elders, and others of the church may *seal* unto themselves the wives of others as *spiritual* wives for eternity; so that in the land where the "streets are paved with gold" and Mormons are *gods*, the wife is not necessarily obliged to associate with her *poor* husband of earth, but can select her company while here, provided she avoid the "lascivious men of California" and choose a faithful saint. Virgins also can, before marriage, select their heavenly mate by *sealing* on earth.

On the first mention of the new doctrine of polygamy, in 1843, it caused great commotion, and many rebelled against it. A few elders attempted to promulgate the *revelation*, but so fierce was the opposition that, while Joseph and a few of his leaders held a monopoly of the "new law," he made public proclamation *against* it in the church paper, the *Times and Seasons*, published at Nauvoo, as follows:

> NOTICE.
>
> As we have lately been credibly informed that an elder of the Church of Jesus Christ of Latter-day Saints, by the name of Hiram Brown, has been preaching polygamy and other false and corrupt doctrines in the county of Lapeer and State of Michigan,
>
> This is to notify him and the church in general that he has been cut off from the church for his iniquity, and he is further notified to appear at the special conference on the 6th of April next, to make answer to these charges.
>
> JOSEPH SMITH,
> HYRUM SMITH,
> *Presidents of the Church.*

This *proclamation* satisfied the "common people," and suited particularly the European missionaries, who took good care to give it publicity. Meantime, Young and his elders had stocked their harems with the choice doves of their flocks.

Mary Ann Angell Young, the second wife of Brigham, (he was a widower with two children when he joined the church,) who now lives in separate quarters at Salt Lake City, soon found herself surrounded by the increasing *wives* of her husband, and this too, while polygamy was publicly proclaimed "the work of the devil." Lucy Decker Seely, the divorced wife of Dr. Seely, was the *second* (or first polygamous) wife, soon followed by Harriet Cook, who gave birth to the first offspring of polygamy—Oscar Young. Clara Decker, Clara Chase, Lucy Bigelow, Harriet Bowker, Harriet Barry, and the charming Emeline Free, so long the favorite of the "president," were all soon added to the harem; Emeline in turn being succeeded among others by Amelia Folsom, Brigham's present centre of affection.

Brigham Young, who for the past twenty-eight years has ruled as a king at the head of Church and State in Utah, has practically fulfilled the injunction to "increase and multiply." His children are counted by scores, and they and his wives, *spiritual* and *temporal*, may never be fully discovered until the division of the property of the dead president enters the courts.

Marriages in Mormondom are not publically proclaimed: no license is necessary, and all unions are "solemnized" at the "Endowment House," in the presence of a few friends only.

Brigham, who was born on the 1st of June, 1801, and was consequently *seventy-one* years of age on the 1st of June, 1872, had, up to that period, *twenty-four wives*, (sixteen of whom were living,) and fifty-four spiritual wives *sealed* to him "for eternity."

Among the wives of Brigham, as among those of many of the saints, are instances of three or four sisters all married to the same man, and mothers and daughters, in pairs and triplets, joining to one husband in the same house, and a grandmother, mother, and child all wives of one man.

The late Heber C. Kimball, who so long stood next in authority to Young, fulfilled well his earthly mission, leaving *seventeen* widows to "mourn his loss," and innumerable children to his "inheritance," besides "spiritual wives for eternity."

All the "apostles," as well as nearly all the Mormon "brethren," embrace polygamy; and they and their children in their footsteps have jumbled the laws of consanguinity beyond the hope of solution.

The marrying of brothers and sisters, at least of the half-blood, has been permitted; and innumerable instances of marriages with nieces and other close blood-relations are constantly occurring. Two of the daughters of Brigham Young are married to H. B. Clawson, a prominent saint, and but recently the aggregate wives of five Mormons numbered *seventy*, and their offspring *one hundred and fifty*.

The doctrines of Mormonism, as given by "Joseph the prophet," are as follows:

"We believe in God the Eternal Father, and in His Son, Jesus Christ, and in the Holy Ghost.

"We believe that men will be punished for their own sins, and not for Adam's transgression.

"We believe that through atonement of Christ all mankind may be saved by obedience to the laws and ordinances of the gospel.

"We believe that these ordinances are: First, Faith in the Lord Jesus Christ; Second, Repentance; Third, Baptism by immersion for the remission of sins; Fourth, Laying on of hands for the gift of the Holy Ghost.

"We believe that a man must be called of God by 'prophecy and by laying on of hands,' by those who are in authority to preach the gospel and administer the ordinances thereof.

"We believe in the same organization that existed in the primitive church, viz.: apostles, prophets, pastors, teachers, evangelists, &c.

"We believe in the gift of tongues, prophecy, revelation, visions, healing, interpretation of tongues, &c.

"We believe the Bible to be the word of God as far as it is translated correctly. We also believe the Book of Mormon to be the word of God.

"We believe all God has revealed, all that He does now reveal, and we believe that He will yet reveal many great and important things pertaining to the kingdom of God.

"We believe in the literal gathering of Israel, and in the restoration of the ten tribes; that Zion will be built upon this continent; that Christ will reign personally on the earth, and that the earth will be renewed in its paradisiac glory.

"We claim the privilege of worshipping Almighty God according to the dictates of our own conscience, and allow all men the same privilege, let them worship how, where, or what they may.

"We believe in being subject to kings, presidents, rulers, magistrates; in obeying, honoring, and sustaining law.

"We believe in being honest, true, chaste, benevolent, virtuous, and in doing good to all men. Indeed, we may say that we follow the admonition of Paul: 'we believe all things; we hope all things;' we have endured many things and hope to be able to endure all things. If there is any thing virtuous, lovely, or of good report, or praiseworthy, we seek after these things."

How closely the *practices* of the "Latter-day Saints" comport with the "inspired doctrines" may well be known by the dark catalogue of crime on the court records of Utah against the "head of the church," his apostles and followers, and the misery and social disorder of the harems.

In American polygamy, as in the East, women are generally regarded little better than slaves; herded as they are, in Young's and Kimball's and other establishments, by scores, giving birth to children whose fathers are claimed as *husband* in such infinitesimal parts that love and the kindred accompaniments of the household are mythical illusions, leaving the hearth of home a barren waste, and the heart of woman an empty sepulchre, where the light of love never casts a ray to dispel the eternal eclipse, in whose unholy shadow the cankerworm of jealousy and the pangs of despair gnaw their victims to the grave.

If the sullen, dreamy apathy of the Mormon women, looking with wild distrust upon husbands claimed by others, and wincing under unprovoked neglect, or the display of hypocritical affection to associates by their lord; the unwelcome proclamation of the birth of the child of their associate in fractional wedlock; and the pangs and gloom to which their imprisoned and impoverished love is bound as it struggles through the night of absolute despair—if these things be "joy and gladness," and "woman's highest mission," by what name shall we call the ordered laws that centres one woman's love to the heart of one affectionate and confiding husband, where the mutual love and parental joys are lighted anew in the innocent faces proclaiming the unity of souls in the "twain flesh made one?"

Society, as it is known in other parts of America, is entirely unknown in Utah. There is but little intercourse between Mormon families. Even in the city of Salt Lake, where an elegant theatre is maintained, it is patronized chiefly by Gentiles and apostate Mormons. Visiting among women and evening entertainments are rare, and Gentile men are excluded from all intercourse with the wives and daughters of the saints.

On the Sabbath the harems let loose their flocks, who file in solemn procession to the tabernacle, to listen to the prophecies of Joseph, and the laws of "increase," as expounded by the "elders of the Lord."

In Salt Lake City, a few leading Mormons who have means maintain spacious establishments, where their wives and families live in comparative comfort. But as the great body of the people are poor, a man often finds it burdensome to support five, eight, or ten wives, so the women soon find that they have to rely upon their own industry for their bread. Dress, fashion, and the filigrees of modern city women are unknown among Mormon wives. Plain dressing, plain food, hard work, obedience, baptism, and child-bearing are the pleasures and duties of Mormon women.

Of late years, the influx of Gentiles, railroad intercourse and enterprise in the Territory have somewhat changed the position of the young Mormon females, many of whom decline to enter the harems, and leave the country, seeking homes and protection in California, Oregon, and Nevada, and other sections, much to the displeasure of the bishops and elders.

The solution of the "Mormon question" still distracts the country. Utah as a State, with an anti-Mormon majority, could soon exterminate polygamy. As a Territory, with Mormon juries, no punishment can be imposed on Mormon offenders. A few years, however, at most, will give Utah an anti-Mormon majority, when Mormonism, now embraced by about eighty thousand in Europe and America, will be weeded out of Utah, and eventually be known only as a thing of the past.

# CHAPTER XXXV.

## ARIZONA TERRITORY.

Area and population—Climate—Soil—Mountains—Rivers—Forests—Mines — Mining—Minerals—Settlement—Civilization — Railroads—Indians.

THE Territory of Arizona is situated in the semi-tropical region lying directly east of California and west of Mexico, and is bounded on the south by the Republic of Mexico, east by New Mexico, north by Utah, and west by the Colorado river, which forms the boundary between the extreme southeastern corner of California and the northwestern part of Arizona.

This Territory, which embraces an area of 126,140 square miles, was acquired from the Republic of Mexico by the conquest of California, and the "Gadsden Purchase;" and by act of Congress of the 24th of February, 1863, was organized with a territorial government, with the capital at Tucson.

In 1870, the population of this Territory, exclusive of Indians, was but 9,658; of whom but 3,849 were native born, and 5,809 were foreigners. The preponderance of foreigners is owing to the fact of the large numbers of Mexicans in the country. There were at this period but twenty-six colored people and twenty Chinese in this Territory.

The climate of Arizona is exceedingly dry in its western division, and in the section adjoining the River Colorado; and in many portions of the interior the heat of summer is intense, it often reaching one hun-

PROCURING POISON FOR HIS ARROWS.

(The murderous Apache, holds the fresh liver of the Deer to the Rattlesnake, dips his arrow points in it, or drying, powders and retains for future use.)

dred and twenty degrees in the shade, at which it will continue for many days in succession. Winter in these quarters is almost unknown, and, except upon the high mountains, snow never falls; but in the northern and eastern portion of the Territory the mountains are clad with snow perpetually; throughout the valleys and low hills snow and frost are unknown, and the climate of the Territory may be called perpetual summer. The rainfall in the western part of Arizona does not exceed four inches per annum; but, throughout the central and eastern division, sufficient rain falls for agricultural purposes.

The physical character of the country is rugged in the extreme, and large areas of mountain and alkaline deserts are unfit for cultivation. In many portions large grazing-ranges exist, and there are innumerable rich and fertile valleys, well adapted to agricultural pursuits, and where many of the tropical and all the semi-tropical fruits grow abundantly.

Owing to the sparse population and the continuous excitement in the Territory about mines, but little has been done in developing the agricultural resources of the country; but the richness of the soil, the wide and excellent pasture-ranges, and the mildness of the climate, all tend to make this Territory a very desirable field for the immigrant and the employment of labor and capital.

Many portions of the country are but poorly watered; but vast areas are supplied with abundance of water from the innumerable branches of the Colorado and Gila, the two principal rivers in the Territory. The Gila, flowing from east to west in a vast body, empties into the Colorado near a point where the boundary of California, Arizona, and the Republic of Mexico join on the Colorado. From this point, both the Gila and Colorado rivers flow in one mighty current to the Gulf of California, and through these waters reach the Pacific ocean.

The Colorado river, having its source in the Rocky mountains, courses southwestward through Wyoming, Utah, and the northwest corner of Arizona, forming the western boundary of the latter Territory. This vast river (often interrupted in its course of more than one thousand miles from its source to the sea) is navigable for steamers of large size for a considerable distance from the Gulf of California, and upon its upper waters to steamers of light draught.

Forests of considerable extent exist in many parts of the country, and the scenery is generally picturesque, many of the hill-sides being covered with a dense growth of small trees; so that, amidst forests, dashing cascades, bald mountains, and snow-clad peaks, many sections of Arizona present unsurpassed scenes of natural beauty.

As yet the great resources of this Territory are undeveloped. The hardy miner has, however, established the fact that mines of gold, silver, copper, lead, and iron of great extent and richness abound throughout the whole country. Not only are these metals found in the bowels of the earth, but *mountains* of lead, copper, iron, sulphur, and salt rear their heads, confronting the explorer on every side, and impressing him with the vast wealth of this almost unexplored region, destined to become at some future period the centre of civilized society, and a prosperous State in the American Union.

The annual product of the precious metals in Arizona, even with its scant population and great disadvantages, is about $1,500,000; but, by the application of machinery and well-directed efforts to develop her mineral resources, there is no reason why Arizona should not yet equal in her mineral productions the greatest yield of California in her best days.

Trade with Arizona has been carried on chiefly with California. Nearly all the supplies—provisions, merchandise, and machinery—used in the Territory go from San Francisco either to San Diego, thence across the country by teams to the Colorado, or by steamers and sailing vessels up the Gulf of California and the waters of the Colorado, thence to the interior. A line of railroad, (the Southern Pacific,) projected from San Diego, California, intended to run in an easterly and westerly direction, crossing the Colorado, and passing through the extreme southern part of Arizona, New Mexico, Texas, and Arkansas, crosses the Mississippi at Memphis, making connection with the whole Atlantic coast, and thence to the Atlantic seaboard; and another road —the Atlantic and Pacific, or 35th parallel railroad— projected farther north in California, and intended to pass directly through the centre of Arizona, New Mexico, Indian Territory, and Missouri, crossing the Missouri at St. Louis, and passing on in an easterly direction to the Atlantic States, will, when completed, so develop the great natural wealth of this almost unknown region that it must attract a large share of the immigration of the country, and become the centre of great mining activity. Both roads are now being vigorously pushed, and but a few years will elapse before two southern through railroads from ocean to ocean will bring this beautiful region of country a prosperous State in the Union.

The Territory, with all its drawbacks, is struggling for the development of its resources and the establishment of civilization. Tucson, the capital, Tubac, Arizona City, La Paz, and Prescott, the principal towns, show signs of enterprise and refinement. Schools, churches, and the printing-press assert their dominion, and soon will the murderous scenes of the forest savage give way to the pursuits of industry and the laws of civilization. Already there are three newspapers published in Arizona—one at Tucson, one at Prescott, and one at Arizona City.

Arizona is the paradise of the *red man.* Here for hundreds of thousands of years (for aught we know) he has angled in its streams, hunted in its glens, roamed over its valleys, lurked in its forests and deep cañons, listened to the wild roar and watched the maddened leap of its cataracts; here he listened to the traditions of his fathers, and buried the bones of his ancestors; and here, with a pertinacity worthy of a better cause, he holds on to the hunting-grounds of his fathers; here the *Mojave*, *Yavapai*, *Pima*, *Yuma*, and the murderous *Apache* whet their knives and raise the bloody tomahawk for the scalp of the "pale face," and exhibit such fierce resolution and brutality to hold on to the expiring embers of primitive barbarous life and the last hunting-grounds and the last natural rights of a once numerous and powerful but fast-expiring race, whose history, from

INTERVIEW WITH A GRIZZLY.

APACHE SQUAW SCALP DANCE, ARIZONA.

SHOOTING MOUNTAIN SHEEP IN THE ROCKY MOUNTAINS.

INDIAN'S GAMBLING.

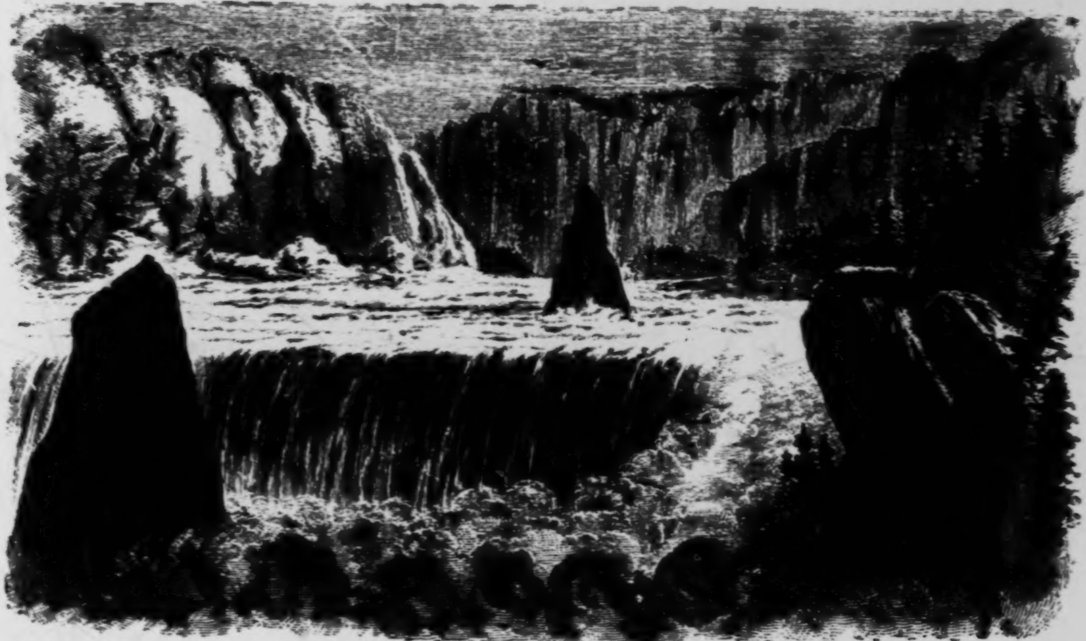
the landing of the Pilgrims to the present hour, has filled our records with chapters of blood and scenes of most revolting barbarity, making the extinction of the aborigines a desired consummation.

The *Apache* tribe of Indians in Arizona are the most warlike and fierce enemy of the white man of all the races on the continent. Their "braves" are powerfully built, active, muscular, daring, and savage as a gorilla. All efforts yet made to reconcile these savages to fellowship with their white brethren have been in vain. They are still numerous and powerful, defying the feeble efforts of humanitarian and soldier alike. The mild climate, abundance of game, and the fleet ponies upon which they are mounted, the deep forests, dark ravines, and gulches, whose winding ways are known only to the Apaches, enable them from their places of security to pounce like wild beasts upon immigrant, miner, or soldier alike.

So determined are these savages to drive the whites out of their country, and in such dread do the people hold the poison-arrow, scalping-knife, and tomahawk of these "red devils," that mines of fabulous richness, rich farming and grazing lands alike, are all abandoned; and, despite of a few feeble military posts in the Territory, the Apache still holds sway, and the power of life and death even of the military forces. But alas! for the *red man*, his days in our land are numbered, and the sands of his time fast leave an empty glass in which his shadow is but dimly reflected. Railroads and "civilization" have, from Maine to Oregon, sealed his fate; his canoe lies stranded upon the shores of the great lakes; his bow and arrows hang upon the forest trees;

his tomahawk rests upon the ground; his hunting-grounds wave in rustling corn; his war-whoop dies upon the passing breeze, to be answered by the shrill whistle of the iron courser, whose fiery breath proclaims the departure of a past race to its eternal hunting-grounds.

"Lo! the poor Indian!" he has left no written language, no laws, customs, arts, nor architecture to perpetuate his memory; his stone-axe, poison-arrow, and bloody record proclaim for a brief period his fierce career; while his euphonious names, like jewels of antiquity, cling to our lakes, rivers, and mountains, to recall to the future historian the existence of a race whose origin is a mystery, whose career and extinction are not unalloyed with romance and incomprehensible fatality.



THE GREAT SHOSHONE FALLS, SNAKE RIVER, IDAHO. (Fall 200 feet.)

## CHAPTER XXXVI.

## IDAHO TERRITORY.

Area—Geography—Mountains—Rivers—Forests—Lakes—Scenery—Waterfalls—Valleys—Agriculture—Climate—Indians—Gold and silver mines—Material progress—Railroads—Cities and towr—Population.

The Territory of Idaho embraces an area of 90,932 square miles. It was formerly embraced within the Territory of Oregon, and more recently within the area of Washington Territory; and was, in 1863, with its present limits, organized with a territorial government by act of Congress. The Territory in length, from the northern line of the State of Nevada to British Columbia in the north, running the whole length of Oregon and Washington Territories, is about five hundred miles. At its northern end it is narrowed to about fifty miles, lying between the western slope of the Rocky mountains and Washington Territory on the west. From this point, extending south until it reaches its southern boundary, it gradually widens, until it finally attains a width of three hundred miles.

Idaho is bounded on the west by Oregon and Washington Territory, north by British Columbia, east by the Rocky mountains and Wyoming Territory, south by Nevada and Utah; the crest of the Rocky mountains forming the entire eastern line, leaving the whole of this Territory west of that range of mountains.

The surface of Idaho is a succession of lofty mountain chains, rugged hills, alkaline and volcanic flats, rolling pasture-ranges, and numerous fertile valleys. The Territory is well supplied with water by several rivers of magnitude, and innumerable dashing streams, fed by the eternal snow of the mountains. The chief river in Idaho is the Snake, sometimes known as Lewis river; having its source in the western slope of the Rocky mountains, and coursing in a westerly direction across the entire width of the southern part of the Territory, a distance of more than three hundred miles, until it reaches the eastern boundary of Oregon, where it turns directly north, and for a distance of two hundred miles forms the line between Oregon and Idaho. A few miles north of this point, at the city of Lewiston, where the Territories of Washington and Idaho are divided by this stream, it turns directly west, and for one hundred additional miles keeps this course, until near Wallula, in Washington Territory, it empties into the main Columbia, and is carried to the Pacific ocean.

The Snake river, in its circuitous passage from the Rocky mountains to Lewiston, runs through a great variety of country—sandy desert, elevated table-land, rich valleys, deep cañons and gorges; and often cutting through and leaping over high mountains, creating in its passage impassable and lovely cascades and falls of great magnitude and beauty. The Shoshone falls, in the southern portion of the Territory, but thirty-five miles north of the point where Utah and Nevada join upon the southern line of Idaho, and one hundred and fifty miles from the western line of Wyoming Territory, is surpassed only in magnitude by Niagara and the Yosemite. The Great Shoshone has an uninterrupted descent of two hundred feet, pouring its mighty flood below, presenting a scene of unsurpassed beauty, and cuts off the further passage of the salmon, which abound in all the waters from this point to the Pacific ocean.

From the Columbia to Lewiston, one hundred miles, the Snake river is navigated by steamers; but beyond this point, owing to the numerous falls and rapids, there is no navigation. Innumerable branches of the Snake river intersect the whole country upon both sides of the main stream.

In the extreme northern corner of Idaho is Clarke's Fork, a branch of the Columbia river, of great magnitude, in its course passing through Lake Pen d'Orellie, twenty-two miles in length and six miles in width. Forty miles south of this lake, and near the line of Washington Territory, the Spokan river, a branch of the Columbia, enters and passes through Lake Cœur d'Aline, twenty-five miles in length and five miles in width. There are several lakes of less magnitude than the two here named in the Territory, and many streams of great volume and beauty.

Forests of considerable magnitude, in which a great variety of valuable timber grows, are found; and there are large areas of grazing and agricultural lands. Boise, Wieser, Payette, Camas, and other valleys, contain hundreds of thousands of acres of superior land; and Bear Lake valley, in the extreme southeast corner of the Territory and close to the line of Utah Territory, and in which there is a Mormon settlement of five thousand people in a prosperous condition, is one of the richest agricultural districts on the Pacific coast. The climate is mild, and the soil rich beyond comparison. In this fertile valley are situated Bear lake, and the Bear river, a stream of considerable size, coursing through Bear valley in a circle, and finally emptying into Great Salt lake in Utah.

Monument, a station on the Central Pacific overland railroad, at the northern end of Great Salt lake, is but twenty miles from the southern line of Idaho, near Bear valley, and from this and other points of this road travellers entering the southern portion of the Territory will find the easiest and shortest route. To reach the northern portion of the Territory from the Pacific side, passage can be made by the waters of the Columbia and Snake rivers, or by a journey overland through Oregon.

The climate of Idaho in the northern section in winter is cold, and snow of great depth falls, and frost is severe in the mountains; but the cold of winter is much less than the cold in the same latitude east of the Rocky mountains. There are wide pasture-ranges in the Territory, and cattle, horses, and sheep in great numbers are driven toward the south, where they graze all winter upon the bunch grass and rich foliage of Southern Idaho; indeed, even in the northern part, cattle are rarely housed in winter. Summer in Idaho is delightful. The extreme heat of the Atlantic States is not experienced, and the evenings are cool and the general temperature bracing and charming. In the forests wild game is abundant, and the principal streams abound with salmon, trout, and other fish.

The red men, although still found in the country in considerable numbers, are neither numerous nor warlike, and, as in most parts of the West, having spent their fury, are slowly passing away to the shades of oblivion.

So far, mining is the chief business of the Territory, and, like the whole range west of the Rocky mountains, gold, silver, and other minerals are found in most of the mountain ranges, and many mines are worked with vigor and with great profit. The annual yield of gold

COUNCIL WITH FRIENDLY NEZ PERCES INDIANS, IDAHO.

EMIGRANTS FORDING THE SNAKE RIVER.

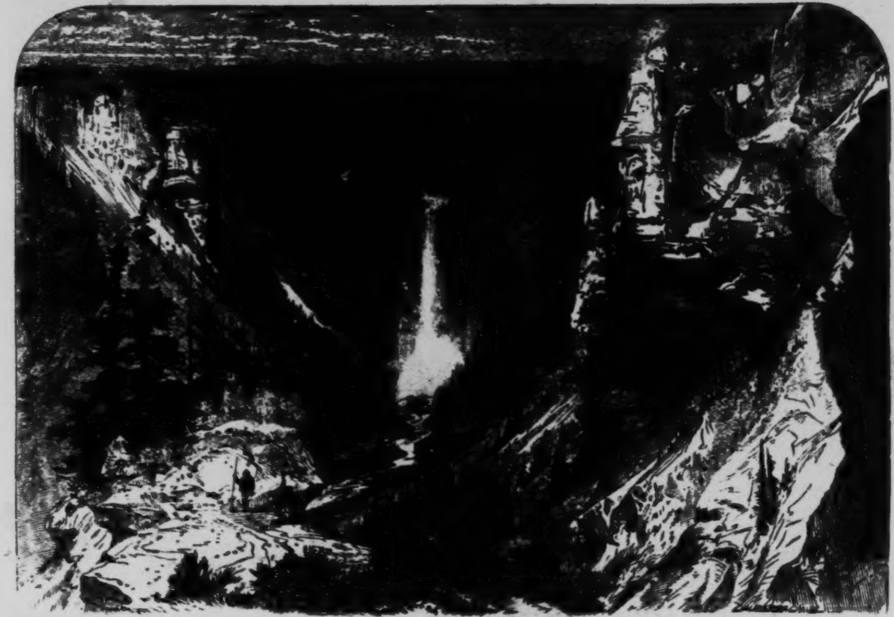
and silver in Idaho is about $8,000,000—one-third as much as the annual yield of California at the present period. Many other metals besides gold and silver have been discovered, but, as yet, have been but little developed. Gold was first discovered in Idaho in 1852, about the banks of the Pen d'Orellie river, but attracted little attention. The discovery of the Oro Fino mines, in 1860, awakened great interest, and drew a large number of gold-hunters from California and Oregon toward the then almost unexplored region of Idaho. Since that time forward, settlement has gone steadily on, and a degree of prosperity highly creditable to the pioneers and sparse population of this heretofore remote and inaccessible region has been attained. Idaho, under the stimulus of the industry of her people, her great natural resources, as well in agriculture, grazing, and lumber as in mines of gold and silver, is fast attaining importance. Each year the capacity of the soil for producing wheat, oats, barley, vegetables, and fruit of almost every variety is becoming understood; and blooming orchards, waving fields of wheat—the latter producing from three to five times as many bushels to the acre as does Illinois, Virginia, or Tennessee—and wide and luxuriant pasture-ranges swarming with fat cattle, attest the capacity of the soil, and give hope of a future vigorous and prosperous State.

The Northern Pacific railroad, now being built from Lake Superior to Puget sound, will pass through a great portion of this Territory, and materially develop its resources and increase its population; and the projected Canadian Pacific road, from Canada to British Columbia, when constructed, will be tributary to this and all the American territory immediately south of that line.

Several towns of some importance have sprung up in Idaho. Among the principal ones are Lewiston and Idaho City, the latter with a population of 889, Silver City, with 599, and the territorial capital, Boise City, with 995. This city is situated in the southwestern corner of Idaho, one hundred and ten miles north of the southern line, and sixty miles directly east from where the western boundary joins the State of Oregon.

The progress made in quartz-mining has been considerable. There are now thirty quartz-mills in operation; and twenty-five saw-mills and ten flouring mills. Churches, schools, and theatres are maintained. Four newspapers are published in Idaho, and the territorial and Supreme Court libraries, at Boise City, contain an aggregate of fifteen thousand books.

Idaho, like many of the Territories of the United States, presents the somewhat remarkable condition of a preponderating element of foreigners in her population. The census of 1870 shows the entire population of the Territory to have been 14,999; of whom 7,114 were native and 7,885 were of foreign birth. Of the aggregate population, 10,618 were white and sixty colored, besides 4,274 Chinese. The Chinese in this Territory, as in every section of the republic west of the Rocky mountains, push their way into every portion, however remote; establishing their wash-houses, engaging as laborers, servants, and miners, and, while oblivious to latitude, language, laws, and customs, seem to fully comprehend the value of the charmer, *gold*, whose glitter brought them over deep seas and desolate plains and into the fastnesses of the great American deserts.



THE GREAT CAÑON AND LOWER FALLS OF YELLOWSTONE, WYOMING TERRITORY.
Line of the Northern Pacific Railroad.)

THE DEVIL'S SLIDE, MONTANA, YELLOWSTONE REGION,
(Vertical walls 1,500 feet in length; 125 feet high and 30 feet broad. Line of the Northern Pacific Railroad.)

# CHAPTER XXXVII.

## WASHINGTON TERRITORY.

**History, area, and population—Boundary—Geography—Mountains—Lakes—Rivers—Bays—Harbors—Seasons—Climate—Agriculture—Grazing—Forests—Lumber—Commerce—Fish—Game—Natives—Gold, silver, coal, and other mines—Progress—Railroads.**

WASHINGTON TERRITORY was, until 1853, a part of the Territory of Oregon, at which time it was by act of Congress erected into a separate Territory, with an eraa of 69,994 square miles This Territory is the extreme western portion of the United States south of British Columbia, and possesses the greatest extent of navigable waters of any State or Territory in the republic. Passing through the centre of the Territory, from north to south and from east to west on its eastern boundary, are one thousand miles of the Columbia river; and on its western shore are five hundred miles of the Pacific ocean, and within the circle of its great harbor—the inland sea, Puget sound—including islands, are three thousand one hundred miles of shore line, all accessible to the largest class ships; making an aggregate of four thousand six hundred miles of navigable water line in the Territory.

Washington Territory is bounded on the south by the River Columbia, which forms the line between this Territory and the State of Oregon; east it is bounded by Idaho; west by British Columbia, the boundary being the forty-ninth degree of north latitude; on its northwest corner is the Strait of San Juan de Fuca, and upon its western line the Pacific ocean.

The general features of the surface of this Territory are dense forests of fir and other trees, broad plains, numerous fertile valleys, rugged hills, and snow-capped mountains, whose bald and snow-clad tops stand high above the surrounding country; numerous lakes, great navigable waters, and dashing streams of much volume and beauty.

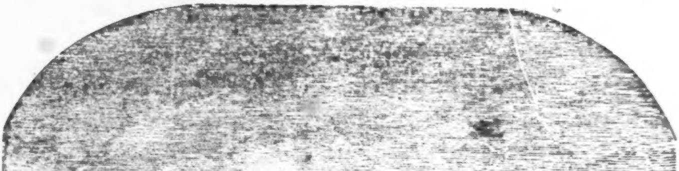
The two chief mountain chains in Washington are the Coast Range, broken and irregular, and the Cascade range, bold and well-defined. In this latter range is the highest mountain between California and Alaska, Mount Rainier, about seventy miles southeast from Olympia at the head of Puget sound, and standing 14,444 feet above the waters of the ocean. In the same mountain chain, and about the same distance from Olympia as is Rainier, but a little more toward the west, stands Mount St. Helen's, 9,550 above the sea level. Forty-five miles directly north from the town of Dalles, on the Columbia, is Mount Adams, 9,570 feet in height. All these mountains are in the Cascade range, and their snow-clad summits can be seen from Olympia, the Columbia river, and surrounding country at all seasons of the year.

Near the northwestern corner of the Territory, and about fifteen miles from the British Columbia line, and twenty-five miles directly east from the ocean, is Mount Baker, 10,700 feet in height, and a most prominent object from the waters of Bellingham bay, Straits of Fuca, Puget sound, and adjacent country. The next mountain of prominence in the Territory is Mount Olympic, and, although less in magnitude than any of those already named, owing to its location, is the most prominent feature of the whole country. It stands upon the peninsula formed by the waters of the Pacific ocean, the Straits of Fuca, and Puget sound. It is sixty-five miles in a direct line southeast from Cape Flattery, the extreme northwestern point of the Territory; twenty miles south from Port Anglos, on the waters of the Straits of Fuca; forty-five miles about west from Port Townsend, at the entrance of Puget sound; and thirty-five miles northeast from the highest waters of the Pacific ocean. Lifting its head 8,138 feet above the ocean, looking far out upon the waters of the Pacific, and seeming almost to cast its icy shadow far over the sea, stands Mount Olympic—a prominent landmark and object for every navigator, in this quarter of the Pacific, and presenting a strong and beautiful contrast with the verdure of the valleys and the deep green of the tall firs, whose tops struggle in vain to reach the ermine mantle of this stately sentinel of antiquity.

The navigable waters of Washington Territory are of the most extensive and remarkable character. Beginning at the southern extremity of the Territory, at the mouth of the Columbia, which forms the southern boundary of the Territory, dividing Washington Territory and Oregon, it runs northward through Washington Territory and a great portion of British Columbia; has one thousand miles of navigable waters in Washington, one hundred and sixty miles of which—from the mouth of the Columbia to the Cascades—is navigated by ships and large ocean-steamers. At this point, after making a portage of six miles, and another at Dalles, farther up the river, small steamers and sailing vessels ascend for an additional distance of eight hundred and forty miles. Inside the Columbia bar are Gray's and Baker's bays, and twenty-five miles north of the mouth of the Columbia, on the sea-coast, is Shoalwater bay, celebrated for its oyster-beds, but navigable only for small vessels. Twenty miles north of Shoalwater bay is Gray's harbor, admitting vessels of light draught only. From this point to Cape Flattery, the extreme west headland of the Territory, there are several small rivers, but no harbor of any importance. Between Cape Flattery and the mainland of Washington Territory and Vancouver island, on the north and west, is the famous Strait of Fuca, fourteen miles in width, and in the shape of a half circle, sweeping for one hundred and fifty miles from Cape Flattery to near the mouth of Frazer river, in British Columbia, where it meets the Gulf of Georgia. In all this strait not an obstacle is found to impede navigation—no sunken rocks, reefs, or shoals; and ships of the largest size can go close to the main shore and the shores of the islands toward its eastern side. In the middle of the strait the water is more than one hundred fathoms deep, and in some places bottom has not been found. This strait leads into the great inland sea of Puget sound, which enters the northwestern end of Washington Territory.

Juan de Fuca strait, so famous in the early records of the first voyagers on the North Pacific coast, received its name in 1792 from the navigators who, about this period, had confirmed the statements of its real discoverer, the old Greek sailor, *Juan de Fuca*, whose early voyage had not determined that Vancouver was an island, but still left the impression that the island was a part of the mainland. Captain Cook's voyage of 1778, although extending northward beyond the strait, did not discover it. He had followed the outer

CASTLE ROCK, COLUMBIA RIVER.



MOUNT RAINIER FROM PUGET SOUND, (Washington Territory.)

western line of Vancouver island, and it still required the voyages of Meares, Berkely, Duncan, Kendricks, Gray, and others, from 1787–9, to fully confirm the existence of a strait between the Island of Vancouver and the mainland. On the 29th of April, 1792, Vancouver entered the strait and commenced his surveys to confirm the existence of this great navigable water; but Vancouver found the Yankee ahead of him. On his arrival in the sound, he found Captain Gray, of Boston, had navigated the strait, and was there in person, exploring and trafficking with the Indians, dealing out his "Yankee notions" and Massachusetts copper coins to the natives. Gray received his English cousin kindly, and showed him the country "round about," and an American flag floating from a pole on the beach.

In 1592, Apostolus Valerianos, the Greek pilot known as *Juan de Fuca*, was sent by the Viceroy of Mexico on a voyage of discovery along the coast of California and Oregon, and along the northwest coast. Upon this cruise he made his famous discovery of the strait now bearing his name. But his discovery and himself were long regarded as myths, neglected and almost forgotten, as the viceroy, without affording him material aid, recommended him to the King of Spain, with a report of his discoveries; but no aid rewarded the exertions of poor Fuca, who, in 1602, died in Italy, in poverty and obscurity.

A brief narrative of Fuca's discovery, published in 1625 by Michael Lok, entitled "*Purchas his Pilgrimes*," first published under the title of "*A note made by me,* Michael Lok *the elder, touching the Strait of the Sea, commonly called* Fretum Anian, *in the South sea,* through the northwest passage of Meta incognita," had first introduced to the public the discoverer of the Strait of Fuca. Lok had met the old Greek sailor at Venice in 1596, and learned from his lips his triumphs and his miseries. Captain Candlish, the English navigator and buccaneer, the old navigator said, had taken his galleon off the coast of Lower California, "whereby he lost sixtie thousand duckets of his owne goods." Fuca applied to the English government through Lord Cecil, Sir Walter Raleigh, and others, for service under its patronage, in hope of regaining his losses by their pirate countrymen, but without success.

The narrative of Fuca's voyage into the strait says:

> "Also, he said, that he went on land in divers places, and that he saw some people on land clad in beasts' skins: and that the land is very fruitful and rich in gold, silver, pearl, and other things, like *Noua Spania.*
>
> "And also, he said, that he being entered thus farre into the said strait, and being come into the North sea already, [between Vancouver island and the mainland,] and finding the sea wide enough everywhere, and to be about thirtie or fortie leagues wide in the mouth of the straits where hee entered, hee thought hee had now well discharged his office and done the thing which hee was sent to doe, and that hee not being armed to resist the force of the salvage people that might happen, hee therefore set sayle and returned homewards againe towards *Noua Spania,* where he arrived at *Acapulco, Anno* 1592."

Puget sound, from its western entrance near Port Townsend to its head waters at Olympia, is eighty miles in a direct line, and about one hundred and twenty miles by the course generally navigated. North of the entrance at Port Townsend, and toward Bellingham bay, there are several entrances through channels and groups of islands to this sound, and ships of the largest size can at all seasons and with all winds find an easy entrance and exit to and from this magnificent sheet of water.

Bellingham bay, which is fifty miles north of Port Townsend, and which forms an opening into Puget sound, is distant from Olympia one hundred and thirty miles in a direct line; so that Puget sound proper is about one hundred and thirty miles in length in an air-line from its head waters to its northern entrance. The sound has an average width of twenty-five miles, swelling in its widest part to fifty miles. The general course of the waters of the sound is from north to south, and from the entrances to its head is a succession of islands, some small, others containing thousands of acres, and nearly all covered with oak, ash, fir, and other timber, shrubbery, fern, and green grass, lending a most picturesque and romantic appearance to this lovely section. Innumerable channels, inlets, coves, and small bays indent the mainland and the shores of the islands within the sound, which, with the verdure of the surrounding country, the stillness of the waters the dense and deep green forests rising upon either side, and the venerable white heads of the mountains in the background, not only make Puget sound one of the finest and safest harbors in the world but a scene of unsurpassed beauty.

Like the Strait of Fuca, Puget sound is uninterrupted by either rocks, reefs, flats, or shoals—there not being a single object of danger to navigation within the whole length of a coast line, including islands, bays, and inlets, of three thousand one hundred miles. In all this length there is not an object to retard the progress of the largest ocean-steamer, and in most places so deep is the water that the sides of the largest ship will touch the banks before her keel will touch the bottom. With but few exceptions the banks are clay, and the beach white, hard sand and pebble. The water of the sound is of crystal purity, and sixty fathoms deep in many places, and in some parts bottom has not been found with a hundred fathom line. There are several streams running into the sound, but none of any magnitude, and there is no bay or river at its head; but the water of the ocean flows its whole length, making a rise of twelve feet at neap tide and eighteen feet at spring tide. At Olympia, the head of the waters, there is quite a long mud-flat at low tide, but this is the only place of this kind upon the whole sound. Indeed, in most parts, the water is too deep for convenient anchorage.

Ice is never seen in all the waters of Puget sound. It is never stormy upon this inland sea. There are no strong currents, cross seas, gales, nor gusts of wind. The climate is mild, the waters sheltered upon every side, completely landlocked; and pure water, fish, game, wood, and coal are abundant, making it one of the safest and most convenient seaports in the world for repairs and supplies. The waters of Puget sound are navigated by steamers and ships, and steamers run regularly to and from this point and California, Vancouver island, and other places; and fleets of domestic and foreign vessels load with lumber and spars for Europe, Asia, Australia, South America, Sandwich islands, and California.

The climate of Puget sound and adjoining country is mild and generally agreeable, never being too cold nor too hot. It is much like the climate of Oregon. Snow

AN INDIAN CANOE RACE, ON INTERIOR LAKE.

OLD FORT WALLA-WALLA, COLUMBIA RIVER, WASHINGTON TERRITORY.

falls upon the mountain ridges and high lands; and for a few days in each winter a light coat of snow may fall in some of the valleys, but is soon swept away by the heat of the sun. Ice is formed upon the waters of the northeastern portion of the Territory; but throughout the region upon the sea-coast and all the southern section frost and snow are seldom seen. The ground is never frozen. Vegetables grow the year round; and horses, sheep, and cattle graze at large throughout the whole winter. Gardening is generally begun in March, but vegetables and flowers grow every day in the year; and farming is never interrupted by cold or frost. The waters of Puget sound are never frozen, and the climate of winter and summer differs but a few degrees—the mean annual temperature being fifty degrees; winter temperature being forty-one degrees, and mean summer sixty-two degrees. Yet this region is in the line of the forty-ninth degree of north latitude, is three degrees farther north than the city of St. John, Newfoundland, and the city of Quebec, Canada; and is north of the whole of Nova Scotia, New Brunswick, Prince Edward island, and the whole of the River St. Lawrence. But Puget sound is seventy degrees west of St. John's, Newfoundland, and fifty-two degrees west of Quebec, and where the influence of the great interior line of the Rocky mountains and the waters and breezes of the Pacific ocean so subdue the rigors of winter as to make the whole Pacific coast—at least as far as the forty-ninth degree of north latitude—perpetual summer; and even up to Behring strait, in the sixty-sixth degree of north latitude, along the whole coast line, so mild that snow rarely falls upon the low lands, and that heavy falls of cold rains with light frosts constitute the winter of this region on the sea-coast.

One of the chief features of Washington Territory is its vast forests. These consist of fir trees, which, in the vicinity of Puget sound and the whole western portion of the Territory, cover the greater part of the surface and grow to a great size. The forest is dense; the trees straight, free from limbs, and generally carry their thickness well toward the top, which is surmounted with a tuft of evergreen boughs. The timber is free from knots, strong, and durable; and is used generally in house and ship building, and makes the finest masts and spars in the world. The trees generally grow from two hundred to two hundred and fifty feet in height, and from four to ten feet in diameter; and trees are often found to grow three hundred feet in height; and at some of the mills on the sound, planks of two hundred feet in length, clear, and entirely free of knots, are cut. Lumbering, agriculture, and mining are the chief occupations of the people; and sawed and other lumber finds a market in California, Mexico, South and Central America, the Sandwich islands, and even in Australia, China, Japan, and some parts of Europe. With the great supply of timber, the fine harbors, and genial climate of Washington Territory, it must at some day become an important ship-building point.

It must not be understood that *all* the surface of Washington Territory is covered with forest: on the contrary, even in the vicinity of the sound, there are many rich and beautiful valleys, and a considerable area of excellent agricultural land; and agricultural pursuits, which are conducted in all parts of the Territory, show that the soil will produce abundantly of wheat, oats, barley, vegetables, and fruit; and that timothy and clover, neither of which will grow in California, except in a few localities, grow most luxuriantly.

As a grazing country, Washington Territory is equal to any portion of America—the mild climate, native grasses, and rich herbage making it a most desirable place for horses, cattle, and sheep. Animals live in the open air during the whole year, and, with the exception of a few cold or stormy days in January in a few localities, experience little difficulty in supporting themselves without the aid of man.

Wild game of almost every variety—elk, deer, bear, swan, geese, ducks, crane, snipe, plover, grouse, and many others—abound. Fur animals—seal, sea-otter, otter, beaver, mink, fox, martin, and other varieties—are abundant, and of good quality. The bays and rivers are well stocked with fish, salmon of the finest quality abounding in the Columbia and the waters of Puget sound, and all the rivers of any size. Mines of the precious and other metals are found, and worked to great advantage in many parts of the country. On the tributaries of the Columbia, and throughout the greater part of the eastern side of the Territory, gold and silver mines, yielding annually one million dollars, are worked with great profit. Rich deposits of copper and iron have been discovered, and coal-beds of great extent and value abound in the whole country surrounding Puget sound and Bellingham bay. The country generally is well watered with dashing streams, and the falls and cascades afford abundant motive power for the future mechanical industries of this quarter. Wild berries in great quantity and variety grow throughout the Territory, and these, with the abundance of fish and game, supplied the wants of the numerous Indian tribes inhabiting this section. There are still large numbers of Indians in Washington Territory, but, as in most other quarters of the West, they are passing away. Soon will the canoe of the red man be seen upon the waters of Puget sound no more forever. The coming shriek of the steam-whistle will sound the death-knell of the *Chinook*, *Shawnee*, *Walla Walla*, and *Flathead* throughout the forests and along the shores of this western land.

The people of Washington Territory are chiefly American, but there is a large number of other nationalities. It has not yet become dense enough to indulge its members in all the vice of more populous places, and the inhabitants are generally industrious and well disposed. Churches, schools, libraries, and other evidence of progress are to be found. The federal government has donated to the Territory three thousand square miles of land for educational purposes, and a territorial university is maintained at Seattle, on the shores of Puget sound, and free schools are liberally maintained throughout the country.

Washington is divided into twenty-one counties, with the territorial capital at Olympia, at the head waters of Puget sound. The population of the Territory in 1870 was 23,955, having more than doubled during the past ten years. Of the entire population, 18,931 were native Americans, and 5,024 were of foreign birth. There were 207 colored and 234 Chinese in the Territory at this period.

In 1870, there were in Washington Territory twenty-five grist-mills, fifty-six saw-mills, one woollen factory, thirteen newspapers, and four public libraries, containing an aggregate of nine thousand volumes; a territorial university and several schools and churches. There were at the same time within the Territory two hundred thousand acres of improved land, and eleven thousand horses, one thousand mules, fifty thousand cattle, thirty-one thousand sheep, and fifteen thousand hogs; and there were produced in this year four hundred thousand bushels of wheat, three hundred thousand bushels of barley, sixty-one thousand bushels of oats, and thirty-one thousand tons of hay. The lumber resources are almost inexhaustible, and of the very best quality. Some idea of the extent of this trade may be had from the fact that the small population of the lumber districts in the vicinity of Puget sound manufactured, in 1870, *one hundred and ninety million feet*, furnishing cargoes for one hundred and thirteen ships, one hundred and ninety-one barks, forty-five brigs, and eighty-seven schooners, which found their way to all parts of the Pacific coast, South and Central America, Sandwich islands, Australia, East Indies, China, Japan, and Europe.

Altogether—with the mild climate, rich mines, great forests, navigable waters, agricultural and grazing lands, and the large amount of the public domain yet open to settlement—Washington Territory is one of the most desirable sections of America in which the immigrant can seek a home. Here is yet the virgin soil, primitive forests, and great natural wealth for a prosperous and populous State; and here, too, is the last remaining available site in the United States for a great maritime commercial city on the shores of the magnificent inland sea of Puget sound, inviting to its capacious bosom the commerce of Asia and the North Pacific coast, and standing in an almost direct line between the great producing and consuming centres of the world—Europe and Asia.

The *Northern Pacific railroad*, now being built from Lake Superior to Puget sound, will, when finished, draw to its western terminus the nucleus of a great city, develop the agricultural and mineral resources of Montana, Wyoming, Idaho, Northern Oregon, Washington Territory, and a great portion of the rich valleys of that portion of the Canadian dominion between the lakes and the rocky mountains, rich in soil, minerals, and forests, the gold-fields and other resources of British Columbia, and the gold and coal mines of Alaska, and the vast fishing resources of the Pacific.

In considering the new national highway of the North, it is well to estimate its advantages in its commercial and local influences, and also in its national importance. Already the lakes of the interior are connected by water and rail with the Atlantic seaboard, and the products of interior America find their way to the ocean line and to Europe through these channels; but farther toward the West—from the lakes to the Pacific ocean—lies a vast region, mild in climate, rich in soil, minerals, forests, and wonders, yet to be brought under the dominion of man, and upon which prosperous and vigorous States must yet be erected.

The section of country to be affected by the Northern railroad is vastly superior in climate and natural resources to the country between the Sierras and the Rocky mountains, along the Union and Central Pacific roads. An opinion prevails that, along the line of the Northern road, cold must be intense, and the obstructions of snow formidable; this notion is incorrect. As you proceed north from the line of the Union and Central Pacific roads the elevation decreases, gradually falling from 8,235 feet at Sherman, in the Rocky mountains, on the Union Pacific, and 7,042 feet at Summit, in the Sierras, to 4,950 feet at Deer Lodge Pass, and 3,700 feet at Clark's river, on the line of the North Pacific road in the Rocky mountains. These being the highest points on the line of the roads mentioned, it will thus be seen that, along the line of the Northern Pacific road, the elevation is at least three thousand feet *less* than along the line of the Union and Central Pacific roads. This depression continues from Lake Superior to Puget sound on the Pacific, leaving a belt running across the whole continent of from eight hundred to a thousand miles in breadth lying from three to four thousand feet lower than the range from San Francisco to Chicago: forming a depression through which, at least as far east as the Rocky mountains, the mild trade-winds of the Pacific carry their influence, rendering the whole region from Puget sound to the Rocky mountains, and a great area of the territory of British Columbia—even as far north as Lesser Slave lake in the line of the fifty-sixth degree of north latitude—milder in winter than the climate of the States of Virginia and Tennessee.

The new road to the Pacific begins at the head of Lake Superior, passing directly west between the forty-sixth and forty-eighth degrees of latitude through the centre of the State of Minnesota, through Dakota, in the centre of which it crosses the Missouri river and a succession of streams, forests, and fertile valleys; crossing the whole length of Montana Territory, where, for four hundred and fifty miles, it follows the valley of the Yellowstone river, with its fertility, sterility, forests, deserts, lakes, water-falls, fire-holes, hot, mineral, and other springs, and its famous geysers, presenting the grandest combination of beauties and natural wonders on the continent. Yellowstone Lake and the principal geysers lie directly in the line of the Northern Pacific railroad and in the northwestern corner of Wyoming Territory, close to the line of Montana, and just east of the base of the Rocky mountains, and directly in the forty-fifth degree of north latitude and thirty-three west longitude. Here, embracing a vast tract which includes the water-falls, lakes, geysers, hot, mud, sulphur, and other springs, with the beautiful scenery, the National Congress has made a reservation for a public park, where the near future will witness thousands of health and pleasure seekers enjoying the finest natural scenery and grandest combination of natural phenomena in America.

The park reserved by the national government is the largest reservation for public uses in the world, being sixty-five miles in length and fifty-five miles in breadth, or an area of 3,575 square miles. These vast public grounds are under the supervision of a commissioner appointed by the President of the United States; and a large painting of the *Yellowstone cañon*, to adorn the walls of the national capitol, has recently been completed.

At this park, the course of the road turns northwest through the mineral districts of Montana, following the eastern slope of the Rocky mountains, until, at Deer Lodge Pass, it crosses this range and follows on northwest in that portion of Montana west of the Rocky

INDIAN ENCAMPMENT, PUGET SOUND, WASHINGTON TERRITORY.

mountains until it reaches Missoule Mills, near the eastern line of Idaho, where the road will branch, one line keeping on northwest until, at the forty-ninth parallel of north latitude, it crosses in a direct westerly line the northern end of Idaho and Washington Territories, crossing the Columbia river, and on to Puget sound, along the eastern shore of which it passes westward to the great coal regions of Bellingham bay, close to the British line. At Missoule Mills, in the western slope of Montana, where the road branches, one line turns a little south of west, crossing Idaho, and, at its western line, crosses the Snake river at Lewiston, where it enters Washington Territory, and at old Fort Walla Walla crosses the Columbia river, upon the western side of which it passes through the fertile and beautiful country of the Columbia for one hundred and seventy miles to Fort Vancouver, thence turning directly west, following the river, reaches Kalama, on the west bank of the Columbia, where it turns directly north through the rich valley of the Cowlitz to Olympia, where it joins the northern branch in its course westward to the British boundary: making the entire line, from Duluth, Lake Superior, by the branch *via* Vancouver, a total distance of two thousand miles to Puget sound, and by the northern branch, one thousand seven hundred and seventy-five miles.

As a winter road, it is fair to conclude that no greater interruptions from snow will be experienced than prevail in any of the Atlantic States; the whole line of road, from Duluth to Puget sound, has but an average elevation of two thousand two hundred feet, and the fall of snow is much less than it is one thousand miles farther south. In the whole length of the Union Pacific road, from Chicago to San Francisco, during the severe winter of 1871–2, the only obstruction by snow was in the range of the Rocky mountains, at an elevation of from seven thousand four hundred to eight thousand feet above the sea, not an hour's obstruction occurring on any point as low as the highest point on the line of the Northern Pacific road.

The national government, comprehending the importance of this international highway, has aided its construction by donating to it almost twenty-three thousand acres per mile, or *fifty million* acres of land in the aggregate.

The Northern Pacific road will make the route between Liverpool and the ports of Asia one thousand four hundred miles shorter than any line now travelled, and place the great lakes of the interior and the Pacific ocean almost seven hundred miles closer together than the line of the Union Pacific; and New York city three hundred and thirty-five miles nigher to Puget sound than to San Francisco. This northern road will be the natural outlet for the business soon to be developed in the rich valleys of the Red river, the head of the Missouri, Yellowstone, Assiniboin, and Saskatchewan, east of the Rocky mountains, and the rich fields of gold and agriculture in Montana, Idaho, Oregon, and Washington Territory; and its terminus at Puget sound will be the connecting link of the immense Asiatic and Pacific trade passing east of the Rocky mountains, which will include the whaling and other fishing interests of the Pacific, soon to find their natural depot in the splendid and genial harbor of Puget sound.

From Lake Superior to the waters of the Pacific in Washington Territory, on both sides of the Rocky mountains, is a vast region of unsurpassed fertility, where wheat, oats, barley, potatoes, most of the hardier fruits, and every variety of berries and vegetables grow most abundantly: a deep, rich soil, millions of acres of which are ready for the plow; forests of beauty and value, wide grazing ranges, rivers, lakes, and mines rich in gold, silver, copper, coal, and other minerals, almost entirely unoccupied. Here new communities and new States must be built; here is room enough for *fifty million* people. Who can contemplate the future greatness of the new States of this region, and the national importance of its hidden treasures being brought close to our crowded centres by the tireless iron horse, whose ambition sets at defiance the rocks, ridges, and forests of the Rocky mountains!

# CHAPTER XXXVIII.

## BRITISH COLUMBIA.

Geography — History — Hudson Bay Company—Area — Islands—Mountains— Rivers—Lakes — Forests — Climate—Agriculture—Valleys—Seasons—Rain— Bays — Harbors — Inlets—Natural resources—Gold and other minerals—Cities —Customs—Population—Natives—Commerce—Canadian railway.

British Columbia is that portion of the Dominion of Canada lying west of the Rocky mountains, and washed on the west by the Pacific ocean. This is the only portion of the whole possessions of Great Britain on the Pacific, and embraces, besides the mainland of British Columbia, a number of islands in the Pacific, embracing Vancouver, in itself three hundred miles in length and sixty miles wide, Queen Charlotte, and numerous other islands, many of them of great size, and possessing valuable forests, a genial climate, abundance of fish in their waters, and game, and mines of gold, silver, copper, coal, and other minerals within their area.

The colony of British Columbia was formerly a portion of that vast region known as the Hudson Bay Company's territory, which extended from Lake Superior west and north to the Pacific and the Arctic oceans, and included at one time Oregon and Washington Territory, over all of which region the dominion of this once mighty company was absolute in commercial and military affairs, and in a portion of which the Hudson Bay Company still conducts their fur trade to considerable extent.

ELK HUNTING, BRITISH COLUMBIA.

The present limits of British Columbia are west by the Pacific ocean and a portion of Alaska, north by the Arctic ocean, east by the Rocky mountains, and south by Washington Territory, in the forty-ninth degree of north latitude. From this point toward the northwest, the colony of British Columbia has a direct frontage of six hundred miles on the Pacific; here a long tongue of Alaska, of six hundred miles in length and a hundred miles wide, extends along the coast toward the southeast, and cutting off six hundred additional miles of coast line from the colony. The total area of British Columbia, which now includes Vancouver island (lately a separate colony) and a multitude of other islands, is estimated at three hundred thousand square miles.

British Columbia is a succession of mountain chains, rugged peaks, plains, fertile valleys, dense forests, lakes, creeks, and dashing rivers, all making a varied, wild, and picturesque country, and, although still almost in its primitive condition, very desirable in many sections, affording rich agricultural fields and wide pasture-ranges, where cattle, horses, and sheep graze at large throughout the entire year. In the interior, and toward the eastern line of the colony, the mountains are high, and many peaks are perpetually clad in snow; but toward the Pacific side but little snow falls, and on the immediate coast line and the islands the climate is mild—milder than in any portion of the States of Virginia, Maryland, or Tennessee; and the same warm winds and ocean currents from the Pacific, which temper the whole seaboard of California, Oregon, and Washington Territory, keep the climate of the coast range of this section most inviting—so mild in winter that vegetables grow throughout the whole year, and so cool, yet so charming, that the climate of the coast line and the islands is invigorating and delightful. In the greater portion of British Columbia, both islands and mainland, along the coast west of Washington Territory, the winter temperature varies little from an average of 40°; spring, 48°; summer, 62°; autumn, 50°; and the annual temperature, 51°. Rains fall in this section about the same as in Oregon and Washington Territory, being dispersed more generally through all the seasons of the year than along the southern Pacific coast. About sixty inches of rain falls along the coast during the year, the greater part falling from November to April, the rest of the year being comparatively dry.

Along the sea-coast of the colony and the islands are the most charming navigable waters in the world. On the east end of Vancouver island, and followed up to the Gulf of Georgia, is the charming inlet, so placid, the Strait of Juan de Fuca, separating Vancouver island from Washington Territory on the east; thence along the mainland, with Vancouver, Queen Charlotte, and other islands to the south, is a direct line of six hundred miles, indented with innumerable bays, harbors, rivers, inlets, and sounds, including Burard inlet, Howe sound, Jarvis canal, Toba inlet, Bute inlet, Vancouver and Queen Charlotte straits, and many others of great magnitude, with high, hanging, rugged mountain peaks, some bald and stern, others clad in perpetual verdure of forest trees, grasses and herbs, which mirror their beauties in the still waters, upon which float the fleets of Indian canoes, freighted with fish, furs, ivory, and bone for their commercial patrons—the Hudson Bay Company. In climate, beautiful waters, capacious harbors, and safe anchorage, and wild, charming scenery, this coast is not surpassed on the continent. In all the rivers and bays salmon and other fish, of great size and superior quality, abound; and valuable fishing-grounds of cod, halibut, and other deep-sea fish exist off the coast. In the interior, elk, deer, bear, otter, martin, fox, mink, geese, ducks, trout, and a great variety of game of birds and beasts, and valuable fur-bearing animals, are found.

In the interior of the colony many mountain peaks rise to great height, and are clad perpetually in snow. The Rocky mountains, forming its eastern boundary, are known in the colony as Selkirk mountains. Here, in latitude fifty-three north, Mount Brown stands sixteen thousand feet above the sea, and Mount Hooker has an elevation of fifteen thousand seven hundred feet. The course of the Rocky mountains is northward through the country until finally they reach the ice-bound shores of the Arctic ocean. So with the Sierra Nevada range in this region, although passing under other names, run through the whole length of the colony, parallel with the Rocky mountains, bearing with them their rich freight of the precious metals so abundantly diffused in the rich gold-mines of Cariboo, the Frazer, Thompson, and other rivers of British Columbia.

Forests of great magnitude and value, consisting chiefly of fir, oak, cedar, and ash, abound in many parts of the country, and the fir trees often reach a height of from two to three hundred feet, straight and free from limbs, making a superior quality of lumber. The fish, fur, and lumber interests of the colony are very valuable; while coal on Vancouver and other islands, and on the mainland, is abundant and of superior quality. Iron, lead, copper, gold, and silver also exist, and the rich gold-mines developed in 1858 have continued to yield abundantly, not being surpassed in richness even in California or Australia. These mines are chiefly worked in the beds of the rivers, and banks and sand-bars on the Frazer, Thompson, and other rivers and their various branches, which produce free gold of great purity, and of late years quartz veins of great richness have been opened. During the last fourteen years the gold-mines of British Columbia have steadily yielded rich rewards to those engaged, (of course all do not succeed,) and, with about two thousand men employed, the mines now produce over two million dollars annually, and rich discoveries in bank, river, and quartz are being constantly made; indeed, the country has not yet been fairly prospected for the precious metals, and centuries hence will find hundreds of millions of dollars of gold produced from the mountains and gulches of British Columbia.

For stock-raising, the colony has many advantages in its wide ranges, covered with nutritious bunch-grass which grows luxuriantly, and its well-sheltered valleys and hill-sides rich in herbage and pasture; and in the valleys of Bonaparte, Thompson, Nicola, and Frazer rivers, more than twenty thousand head of cattle run at large throughout the whole year, grazing upon the rich natural meadows of the country.

British Columbia is well watered by numerous rivers, lakes, and creeks. The Frazer river is the chief one of the colony. It has its source high in the western slope of the Rocky mountains, close to the fifty-fifth degree of north latitude, running in a southerly direction until, nearly opposite the eastern end of Vancouver island, it empties into the Gulf of Georgia, about fourteen miles north of the line of Washington Territory, and passes into the Pacific ocean. This river is more than one thousand five hundred miles from its source to its mouth, and is navigable for large steamers for one hundred miles, and for an additional hundred miles for steamers of light draught; but its course is generally over a very rough country, forming falls and rapids; and the melting snows of the interior so swell its current that at times, as it passes over its precipitate bed, and through deep, dark, and narrow gorges in the mountains, it is fearful, as in its mad career it forms eddies and whirlpools, which form deep holes, roaring and twirling as they suck down large floating trees, whirling, crashing, and tearing limbs and bark off. Such periods are very dangerous for small boats and canoes, many of which were, during the eventful gold excitement of 1858–9, with their whole crews, swallowed in those dreaded whirlpools.

The material growth of the colony is not yet very great. For almost a century the country has been the great centre of the Hudson Bay Company, an English fur company of great magnitude and influence, which maintained their trading-posts from Labrador to the Pacific ocean, and still hold a footing in the country. At Forts Langley, Hope, and Yale, on the Frazer river, and at Victoria, Vancouver island, this company had maintained villages and posts of importance before the discovery of gold in 1858; from which points, by steamers and sail, the goods for traffic with the Indians found their way direct from London, and the annual and valuable cargo of furs found an outlet on its way to England. At Victoria, which is on the eastern end of Vancouver island the Hudson Bay Company had, long before the gold excitement of 1858–9, laid out, upon a beautifully situated elevation, at the waters of the harbor of Victoria, the site of the present city of Victoria, now the capital of British Columbia. At that period, a strong fort, with upright posts of large hewn logs, of a height of fifty feet, with rifle-pits and mounted guns, were maintained around the large enclosure containing the officers' quarters, storehouses, merchandise, and furs; and one or two steamers carried on the business of the company between this point and all parts of the coast. The officers of the company here, as well as throughout the whole coast, were chiefly Scotchmen, who worked their way overland from Canada at an early day, and, in their long sojourn in the wilderness, had married and intermarried with the native Indians; thus at once securing the friendship of the natives, facilitating traffic, and adapting the family-circle to the primitive order of life in their new rural homes. The late Doctor McLaughlin, of Oregon City, Oregon, a gentleman of high character and attainments, so long the head-factor of the Hudson Bay Company on the Pacific, and James Douglass, now Sir James Douglass, long head-factor at Victoria, and late Governor of Vancouver island, both married Indian squaws and raised families, who were educated in Europe, and, on their return to their forest homes, married with the whites. I do not know of a single case where any of the officers or employés of this company married a white woman: all took wives of the Indian tribes of the coast or interior.

Victoria, in 1857, had a population of about one hundred persons. In 1858, so great was the excitement respecting the gold discoveries on Frazer river that

INDIAN, INTERIOR OF ALASKA.

NATIVE OF BRITISH COLUMBIA.

real estate in San Francisco fell more than a hundred per cent. in a few months, and great depression was experienced throughout California. Four or five large ocean-steamers were employed to their utmost capacity to convey passengers and freight from San Francisco to Victoria, where more than *sixty thousand gold-hunters* had assembled in a few months, and the city of Victoria assumed scenes of excitement equalled only by San Francisco in 1849. The whole hill in the vicinity of the old Hudson bay fort and stores was for miles dotted with tents, as if a great army had invaded the land, and the great steamers, piles of goods, large booths of commerce, drinking-saloons, gambling-houses, dance-houses, real estate and merchandise auctions, with the excitement of building boats and buying canoes, (a passage of from a hundred and fifty to two hundred and fifty miles across the Gulf of Georgia, and thence up the Frazer river, had to be made before the mines were reached, and this in small open boats, most perilous both from the sea and the hostile Indians from the north,) all excited, racing to and fro, carrying boards, bundles, mining-tools, bedding, provisions, clothing, tents, whiskey, and every conceivable article, in their mad rush alike astonished the quiet Hudson bay men, who thought the whole world had gone mad, and the natives, who, awe-stricken, saw more men than they thought had existed in the whole world. After a while these awe-stricken Indians began to learn their own power, and tribes of red-haired savages from Queen Charlotte island and the whole coast came down in their immense wood canoes, (some of which are fifty and sixty feet in length, of the finest lines of a clipper ship, and carrying fifty to one hundred Indians,) and, lying in wait in the Strait of Fuca, Bellingham bay, the Gulf of Georgia, and Frazer river, would attack small boats, rob them of their valuables, and murder all on board. Scores of these deluded gold-hunters, in 1858–9, lost their lives in this way, to say nothing of the loss by small, frail boats swamping in the rough waters of the gulf and in Frazer river. The Chinese were objects of hatred, being regarded as bad Indians, and put to death at every opportunity. Victoria built up to a city of ten or twelve thousand people, in 1859, but soon the miners began to return in great distress and poverty. Goods in Victoria were only half the prices they had cost in San Francisco; real estate fell five hundred per cent. in a few months; the city was almost depopulated, and has since remained a city of emptiness, with five houses empty for every one occupied. It now presents a desolate aspect, with but little prospect of immediate improvement. The population is about four thousand, nearly half of whom are Americans. Churches, schools, and a theatre are maintained; and a line of steamers runs regularly between San Francisco and Victoria, and also between Olympia, Puget sound, and other ports, and this place. The harbor at Victoria is small, and not accessible to vessels of great draught; but about four miles west of Victoria, on the south side of the island, is the harbor of Esquimalt, small, but with deep water, and overhanging with dense fir forests and rocks, making it well sheltered. Here all large vessels, as well as the ships of the British navy in this quarter, enter. Farther west, on the south side of the island, are the expansive waters of Barclay inlet, Nootka sound, and other harbors. On the northeastern end of the island, a little north of Victoria, is the village of Nanaimo, where extensive coal-mines are operated, the product of which, with the Bellingham bay coal of Washington Territory, finds a market in San Francisco and other sections of the coast. Between the east end of Vancouver island and Puget sound is the small island of San Juan, of little importance except as an object of contention between England and America to determine the water-line through the Gulf of Georgia and Strait of Fuca, and to maintain a few lazy soldiers of both countries in the "joint occupancy" of the island.*

Victoria is a free port, and about one thousand vessels enter and depart annually. All this section of country—its trade, natural wealth, and future development—naturally belong to the great port of Puget sound, and must eventually redound to the direct interest of that section and the Northern Pacific railroad.

The population of the colony of British Columbia consists of about ten thousand whites and fifty thousand Indians, half-breeds, and mixtures between Indians and white men. The chief hunting and labor about the Hudson Bay Company's establishment are done by the Indians. Some of the tribes are very numerous and powerful; the men are tall, muscular, and large boned, skin about copper color, and long, flowing black hair, except that some of the tribes from the far northwest coast and Queen Charlotte island, who often visit Victoria in large canoes with their freights of fish, furs, bone, squaws, pappooses, and wolf-dogs, are very light colored, with smooth, copper-colored skin, and flowing hair, quite red. Few of the tribes ever molest the employés of the Hudson Bay Company, most of whom speak the language of the natives as their own, and are connected by marriage with some of the tribes; but with Americans and others they are unreliable, deceitful, and murderous.

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* On the 24th of October, 1872, the Emperor William, of Germany, to whom England and the United States had submitted the final settlement of the ownership of San Juan island, rendered his decision, making the *Canal De Haro* the line between British Columbia and Washington Territory; thus establishing the title of the United States to San Juan island. And on the 22d of November, 1872, the British troops evacuated the island, leaving the Americans in full possession of San Juan.

About Victoria, Frazer river, and all parts of Puget sound, are found numbers of the Flathead Indians. The head is made flat while the child is young, by lashing it on a board on its back and lashing another board tight over the forehead, pressing the back of the head and the front above the eyebrows flat, running to a broad, sharp point at the top, so that, if they put on a hat, it must go on crosswise. The child remains on the board until the skull forms hard in its shape. *God*, they say, was Flathead.

The condition upon which British Columbia entered the Canadian confederation was, that the latter would, not later than July, 1873, commence the construction of the Canada Pacific railway, connecting the lakes and the St. Lawrence river with the Pacific side of British Columbia; which road will be about 2,700 miles in length, commencing at Lake Nippung, near Georgiana bay, and must be completed within ten years after its commencement. The government of Canada and the government of British Columbia have donated to this international highway of the north large tracts of land, consisting of alternate blocks of twenty miles in depth, along the line of the road; besides this, the Dominion government makes an appropriation of *twenty million dollars*.

In addition to the main line, two branches will be built—one from the main line to Lake Superior, and one from Manitoba to the American boundary, where a road already connects with Duluth, at the head of Lake Superior. The Pacific terminus of this road must be on the narrow tongue of land between the Frazer river and the northern line of Washington Territory, at which point it will be connected with the Northern Pacific railroad, now building; and that Washington Territory must eventually receive more direct benefit from this Canadian road than British Columbia must be clear to all familiar with the geography of the two sections.

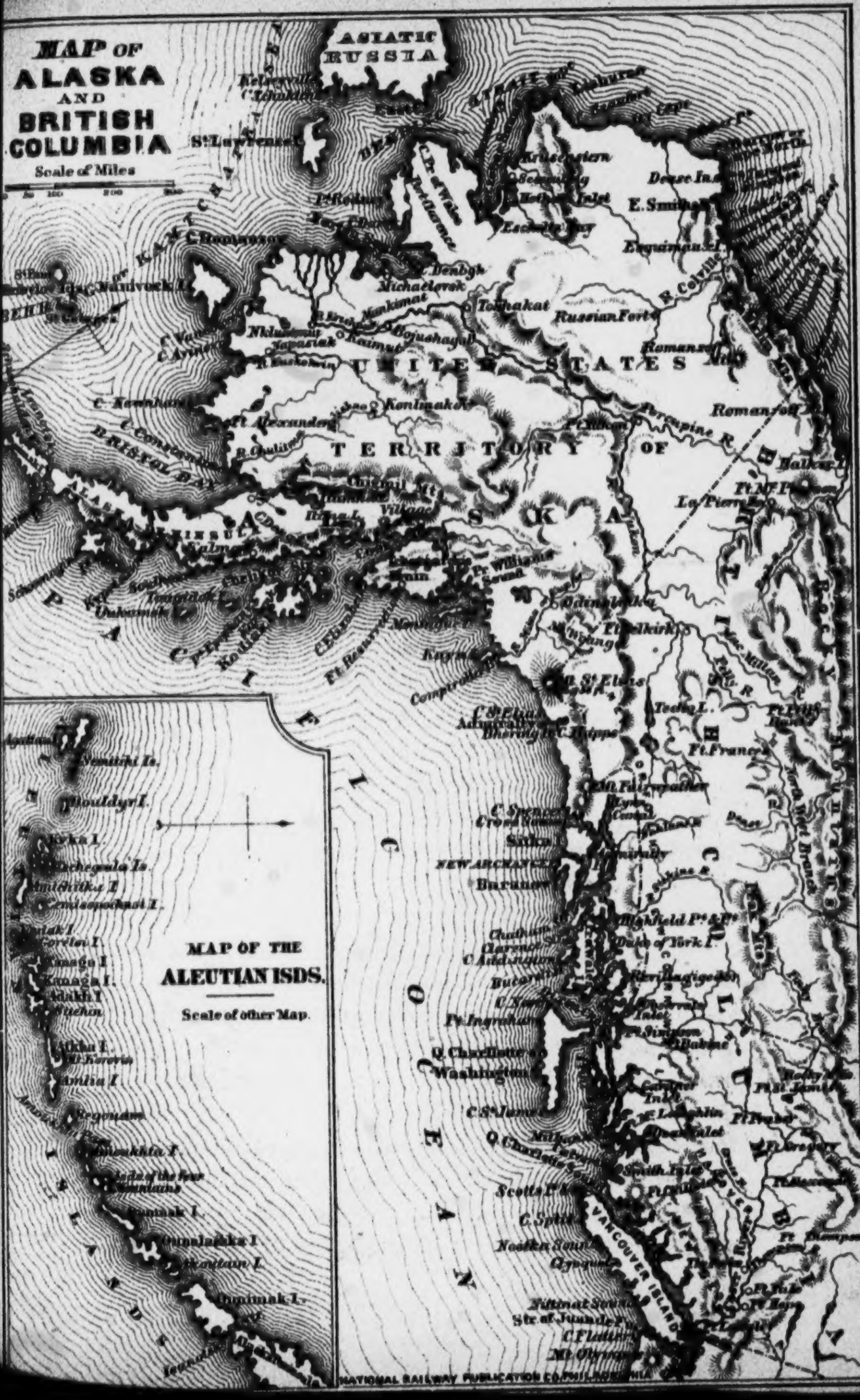
The completion of the Northern Pacific and the Canadian Pacific railroads will open up the rich agricultural and mineral resources of the vast region from the great lakes to the Pacific ocean, and inaugurate new channels of commerce and new organized communities, soon to join in the union of States from the Arctic to the Rio Grande.

# CHAPTER XXXIX.

## ALASKA.

History—Geography—Area—Mountains—Forests—Rivers—Seas—Bays—Harbors—Islands—Climate—Seasons—Mines—Natives—Fish—Animals—Fur-seals—Commerce—Population—Towns—Progress—Religion—Future prospects.

ALASKA, formerly known as Russian America, embraces the extreme northwestern end of the continent of America; bounded on the north by the Arctic ocean and on the west by the Pacific ocean and Behring strait, which separates it from Siberia and Asiatic Russia, from which at the narrowest point in the strait it is distant but about twenty miles. On the Arctic side, the eastern line terminates at Demarkation Point in the line of the one hundred and forty-first degree of west longitude from Greenwich, which course it follows south, dividing the Territory of Alaska from British Columbia on the east, until it reaches Mount St. Elias, about sixty miles from the Pacific ocean, where it turns southeast, and in an irregular line follows the course of the coast, leaving a belt of mountain chain of about an average width of one hundred miles and about five hundred miles in length, until it reaches the one hundred and thirtieth degree of west longitude, a little north of Simpson river, and enters the Pacific ocean north of Graham and Queen Charlotte islands, thus cutting a strip of about one hundred miles in breadth and five hundred miles long off the western shore of British Columbia. From this point, in a southwesterly direction, the coast line of Alaska on the

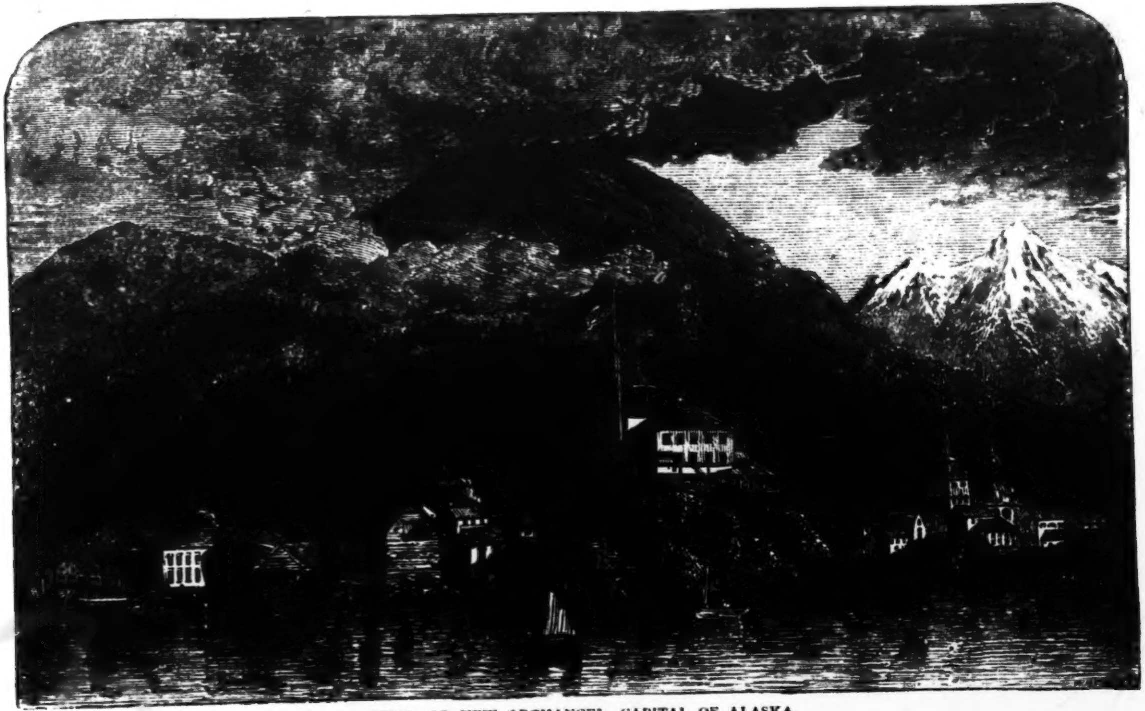

MAP OF ALASKA AND BRITISH COLUMBIA
Scale of Miles
50
100
200
300
ASIATIC RUSSIA
St. Lawrence I.
C. Romanzof
C. Pr. of Wales
Pt. Clarence
Kruzenstern
Hotham Inlet
Escholtz Bay
Dease In.
E. Smith B.
Esquimaux I.
R. Colville
St. Michael
Michaelovsk
Tochakat
Russian Fort
Nunivack I.
C. Vancouver
C. Avinof
Romanzof
UNITED STATES
TERRITORY OF ALASKA
C. Newenham
Ft. Alexander
C. Constantine
BRISTOL BAY
Konlmakof
Pt. Yukon
Porcupine R.
Romanzoff
Peel R.
Ft. McPherson
La Pierre Ho.
Alaska Peninsula
Iliamna L.
Pt. Williams Sound
Oonalaska I.
Kodiak
C. Elizabeth
Ft. Resurrection
Montague I.
Kayak I.
Pt. Selkirk
Mt. St. Elias
C. St. Elias
Admiralty
Behring B.
C. Spencer
Cross Sound
Sitka
NEW ARCHANGEL
Baranof
Teslin L.
Ft. Frances
Chatham
Clarence
C. Addington
Bucareli
Pt. Ingraham
Q. Charlotte or Washington
C. St. James
Q. Charlotte Sound
Scotts Pt.
C. Split
Nootka Sound
VANCOUVER ISLAND
Nittinat Sound
Str. of Juan de Fuca
C. Flattery
Mt. Olympus
Highfield Pt.
Duke of York I.
Revillagigedo
Observatory Inlet
Pt. Simpson
Gardner Inlet
McLoughlin
Dean Inlet
Smith Inlet
Pt. Rupert
Pt. St. James
Pt. Fraser
Ft. George
Fraser R.
Pt. Langley
PACIFIC OCEAN
BRITISH COLUMBIA
ROCKY MOUNTAINS
North West Branch
MAP OF THE ALEUTIAN ISDS.
Scale of other Map.
Agattou I.
Semitchi Is.
Bouldyr I.
Kyska I.
Tchegoula Is.
Amtchitka I.
Semisopochnoi I.
Goreloi I.
Tanaga I.
Kanaga I.
Adakh I.
Atkha I.
Amlia I.
Segouam
Amoukhta I.
Isds. of the four Mountains
Oumnak I.
Ounalashka I.
Akoutan I.
Ounimak I.
NATIONAL RAILWAY PUBLICATION CO. PHILADELPHIA

Pacific is a succession of bays, rivers, sounds, inlets, and islands, forming a chain of abrupt, rugged, irregular coast of more than seventeen thousand miles in extent along the waters of the Pacific, following all the principal inlets and island lines until it reaches Behring strait. Chief among the islands are Prince of Wales, New Archangel, Sitka, and Kodiak, all east of the peninsula of Alaska, and the extensive groups of islands known as the Aleutian islands, extending through thirty degrees of longitude, and reaching almost across the Pacific ocean toward Copper and Behring islands on the Asiatic coast off the shore of Kamschatka. This vast chain of islands, more than a hundred in number, form a half-circle to the north, leaving between it and Behring strait, Bristol bay, and Behring sea, into which empties the Great Yukon, one of the mightiest rivers on the American continent, carrying in its course deposits which form at its mouth the greatest moorland in America, and gradually decreasing the depth of water in Behring sea. In the semicircle formed to the north by this chain of islands, and twelve degrees off the mouth of Bristol bay in Behring sea, are the islands of St. George and St. Paul, so famous for their valuable fur-seals.

This *terra incognita* of the Northwest is yet totally unexplored; and although its coast line on the Pacific has been long the active field of the Russian American Fur Company, and the whaling fleets of the United States, and more recently of the American fur-seal hunters and fishermen of the Pacific coast, but little has been seen of the vast interior region of this country, embracing an area of more than *five hundred thousand square miles.*

The early voyages of the Russian navigators, Behring, Tschirikoff, and others, and the occupation of the Aleutian islands and the mainland by Russian merchants from Eastern Siberia, had given title of the country to the Russian nation, which, by treaty with Great Britain, in 1825, established its eastern boundary as now defined. Carteret, Byron, Willis, La Perouse, Quadra, Vancouver, and many other early navigators, had explored the coast of Alaska; and the famous Captain Cook, in his voyage round the world, had explored much of the coast and many of the islands of this remote region. So, too, the search for the lamented Sir John Franklin and his party drew to the western shore of this section Moore, Kellet, Collison, McClure, and others, who have familiarized to us many of the important points, bays, and inlets of this quarter, as Point Barrow, Point Franklin, Icy cape, Cape Lisburne, Point Hope, Kotsebue sound, Cape Prince of Wales, Porte Clarence, Norton sound, Cape Romanzov, Cook straits, and Bristol bay, all north of the Alaska peninsula and the Aleutian group.

Alaska, formerly known as Russian America, had, from its discovery by the early Russian navigators, been in the possession of the Russian empire, whose dominions extend throughout so vast a portion of Europe and Asia. On the 18th of October, 1867, the government of the United States, by private purchase, and the payment of seven million two hundred thousand dollars in gold, received at Sitka, from the commissioners, formal possession and acquired title to Alaska, taking all the rights of the government and the control of the people; leaving to the latter, however, by stipulation of the 30th of March, 1867, the



SITKA, OR NEW ARCHANGEL, CAPITAL OF ALASKA.

right to remain in the country and become citizens of the new republican government erected over the late dominions of the Czar in America, or to return to the Russian empire. The language of the conditions is:

> "The inhabitants of the ceded Territory, according to their choice, reserve their natural allegiance, may return to Russia within three years; but if they should prefer to remain in the ceded Territory, they (with the exception of the uncivilized tribes) shall be admitted to the enjoyment of all the rights, advantages, and immunities of citizens of the United States, and shall be maintained and protected in the free enjoyment of their liberty, property, and religion. The uncivilized tribes will be subject to such laws and regulations as the United States may from time to time adopt in regard to aboriginal tribes in the country."

Thus the United States, in the possession of the vast Territory from Behring strait and the Arctic ocean to British Columbia on the west, and from the Atlantic and the Gulf of Mexico on the south and east, presses hard its British neighbor on flank and rear; and, as the imperial eagles of the Czar took flight before the stars and stripes on Alaska's lonely shores, so the British lion, before the advance of the new freedoms of the republic and the growing power and progress of America, must soon leave his lair and join in the new order of national freedom, ultimately embracing the whole continent of America north of the Isthmus of Panamá, with the future canal of Darien as the southern boundary of the republic.

The interior of Alaska is rough, mountainous, and wild in the extreme. The great range of the Rocky mountains, which, from Patagonia to the Arctic ocean, passes through the whole length of the continent, reaches the Arctic through British Columbia, as does the Sierra Nevada range; but successions of jagged peaks and ranges dot the country, and along the entire coast of the Pacific a high range of mountains, from eight to ten thousand feet above the sea, covered with dense forests and enveloped in snows and fogs, lends a wild and uninviting aspect to the country. In this range stands the famous Mount St. Elias, in latitude 60° 22′ and longitude 140° 54′, elevated seventeen thousand nine hundred feet, overshadowing every mountain in America north of Popocatapetl, Mexico. Here, too, is situated Mount Fairweather, fourteen thousand seven hundred feet in height. Both these mountains are clad in perpetual snow and are seen at a great distance, standing above all other mountains and above the tall, dense forests. Both these mountains indicate marked evidence of their unquenched interior volcanic forces. In the year 1839, Mount St. Elias emitted volumes of smoke, and, in 1847, flames and ashes. At this time there was a general volcanic disturbance of the earth on the whole Pacific coast north of Mount Baker, and throughout the Aleutian islands evidences of the former existence of destructive volcanoes and earthquakes are still apparent.

Alaska is well supplied with timber, and along a great portion of the coast are valuable forests of fir, oak, ash, cedar, and many other varieties. The cedar of Alaska grows to a great size, and is superior to almost any other wood in cabinet and house work. The Aleutian chain and all the other islands north of the peninsula of Alaska are destitute of forest or other trees, the natives building their huts of mud and stone, and using for fuel bone and the stray driftwood they pick up upon the shores, and building their canoes of skins.

Rivers of great extent and dashing streams course from the interior mountains, and find their way, through rough gulches and long valleys, to the Pacific and Arctic oceans. The Yukon, one of the greatest rivers on the American continent, has its source in British Columbia, in longitude one hundred and thirty west, and with its ten mouths empties into Behring sea near Norton sound, in the sixty-fifth degree of west longitude; and, in its serpentine course, is more than four thousand five hundred miles in length, often swelling to four and even ten miles in width in its numerous arms, dotted with islands, and is navigable for many thousand miles from its mouth. The Meloze, Porcupine, Nulato, and other streams of magnitude empty into the Yukon. A great part of the Yukon passes through a low country, and broad, low valleys, with willows, shrubs, and rich meadows of fine pasture-ranges, skirt it on either side, where vast herds of deer graze throughout the year. South of the Yukon is the Kouskoquim river, with its numerous branches, extending three hundred and fifty miles into the interior; and south of the Aleutian peninsula are a number of rivers of considerable magnitude, with interior valleys and rich forests. The Suschina, emptying into Cook's inlet, is more than two hundred and fifty miles in length, and the Copper river over two hundred miles; and the Stekin, whose mouth is directly east of the island of Sika, extends into British Columbia three hundred miles.

So far as yet ascertained, Alaska possesses but little attractions for immigrants or capacity for agriculture. Along the Pacific coast some small valleys which will produce vegetables, oats, and barley, are found; but it is all far north of the line where wheat-growing or general agriculture could be successfully prosecuted. The summer seasons are short, damp, and cloudy, the rainfall at Sika and vicinity being about *ninety inches* per annum, the greatest in any part of the world; Astoria, Oregon, comes next with an annual fall of seventy-eight inches. From Behring strait to the eastern line of Alaska, on the sea-coast, but little snow falls; and although a portion of this range is as far north as Greenland, yet the warm currents and winds from Asia so modify the climate that in many portions of the low valleys vegetation is green all winter, and cattle could live at large without the aid of man. Alaska is particularly valuable for its forests of valuable timber, mines yet to be developed—coal, gold, silver, copper, and other minerals—its game, and inland and water fur-bearing animals, and its valuable and vast fishing interests.

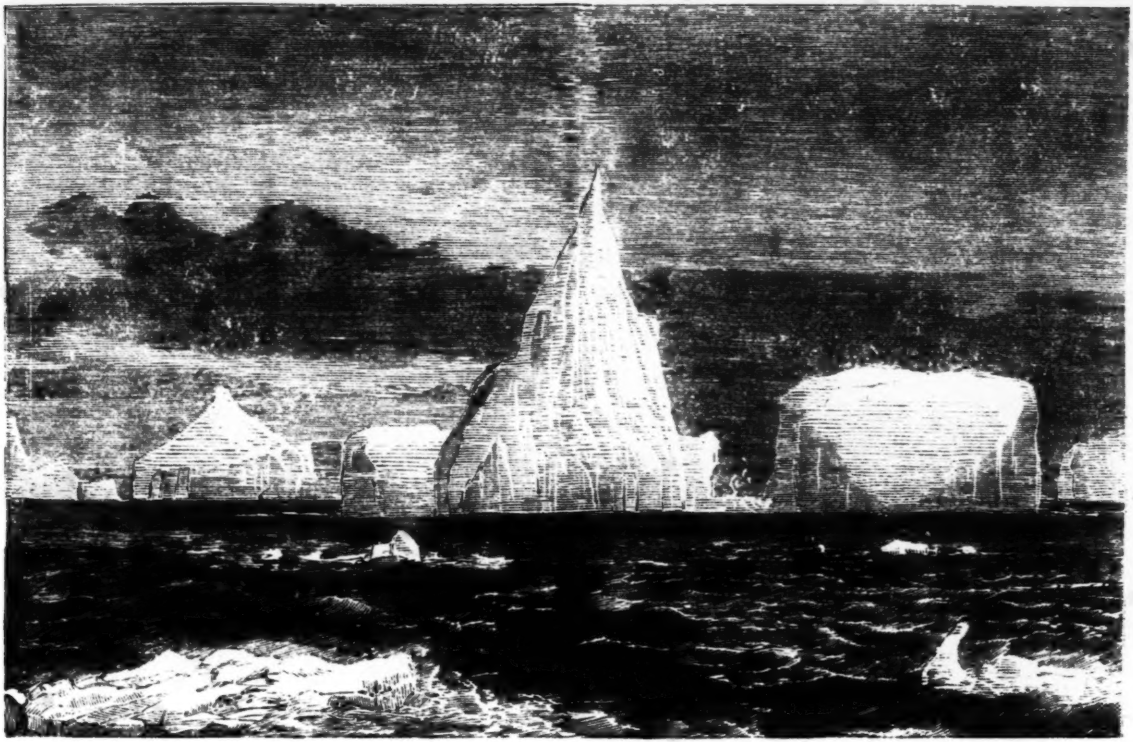
Throughout the whole interior, on the banks of the Yukon and other rivers, and the islands, the Russian American Fur Company—a large body of Russian merchants, incorporated by royal authority in 1799—has built its posts, and for almost a century prosecuted a most extensive and profitable fur-trade. (The company existed many years before its incorporation.) Martin, sable, mink, otter, beaver, and other furs obtained, abound in the interior, and sea-otter and the valuable fur-seal are found on the islands and coast. Some idea of the extent of the Russian American Fur Company may be learned from the fact that two large steamers, several small ones, eight brigs and barques, and numerous small boats, were constantly employed, and about ten thousand Russians, Aleuts, and Esquimaux were engaged on the coast and islands, and six thousand Koloschians engaged in trafficking with the interior tribes for this company. The annual productions of the company amounted to more than a million dollars.

The islands of St. George and St. Paul, in 57° north, longitude 170° west, off the mouth of Bristol bay, in Behring sea, are the resort of the fur-seal, so long so valuable a source of profit to the Russian American Fur Company, and now, by act of Congress, made a source of revenue to the federal government. By this act, approved July 1, 1870, the government grants to the Alaska Commercial Company, composed of capitalists of San Francisco and New York, the exclusive right to take fur-seal on the islands of St. George and St. Paul for the term of twenty years, from the 1st of May, 1870, at an annual rent of fifty-five thousand dollars, and a tax or duty of two dollars and sixty-two and a half cents on each skin sold or shipped, and fifty-five cents on each gallon of seal oil, with twenty-five thousand dried salmon and other articles annually to the natives. The number of skins collected annually is restricted to one hundred thousand, which must be taken during the months of June, July, September, and October of each year. Provision is made, however, for the natives of the islands being housed, clothed, fed, and educated, and for their taking, at all seasons, such seals for food or clothing as may be necessary. The late Major-General Thomas, in his official report on his visiting St. Paul and St. George in 1869, said:

> "The number of seals on the islands, after the young are born, is estimated all the way from *five to fifteen million;* but they are *countless, lying in the rookeries, covering hundreds of acres, like sheep in a pen.*"

The habits of these seals are peculiar. About the last of April, or early part of May, the old male seals come from the south, and land upon St. George and St. Paul, (the only islands inhabited by them.) After thoroughly examining the coast and interior of the islands for several days, soon millions begin to arrive, and, forming themselves into families, or colonies, led by the old males, they slowly make their way to the rookeries or secluded portions of the interior. The able-bodied males form a circle, inside of which they guard the females, keeping the young and the superannuated males on the outside. The object seems to be to protect the females and their young. Fierce battles ensue between the guardians of the families, and also with them and the old and young male seals kept on the outer circle.

Under the regulations of killing these seals, only the young and old males on the outer circle are taken. The native hunters, armed with clubs, make their way along the outer circle of the families, and drive toward the interior the males on the outside of the families. Sometimes they drive them one or two miles; here, out of the range of the families, they slaughter them by striking them on the head with their clubs, secure all the skins they can, and return the next day, to repeat the same operation, until the desired supply is obtained. The old males still keep guard over the females and their young until the young are able to take to the water freely, when all make for the shore and sport on the rocks and in the waters, all mingling again indiscriminately, and remaining on the islands and on their shores until September or October, when suddenly they head south, abandon the islands, and are seen no



ICEBERGS AS SEEN OFF THE NORTHERN SHORES OF ALASKA.

more until the following spring, when, as before, they repeat their family gatherings and births in the rookeries of St. Paul and St. George. It is not known where they go nor whence they come: doubtless they seek refuge in some of the islands off the Asiatic coast.

The fur of these seals is very dark, fine, soft, and beautiful, like the finest black silk velvet, with a golden shade toward the skin. Long, coarse gray hairs stand out above this fine coat, and all skins are pickelled, sent to London, England, (the only part of the world where they are dressed,) where, by a process of operating on the flesh side, all the long hairs are extracted, and the skins dressed, leaving a soft, beautiful plush of great value and highly prized.

Considering the great importance of the whale, walrus, sea-otter, salmon, cod, and other fisheries of Alaska, and the needed development of the resources of the country, both the *constitutionality* and the *equity* of the national government giving *absolute* and *exclusive* control of the islands of St. George and St. Paul, their valuable fur-seals and inhabitants, into the hands of a few capitalists, to the exclusion of all other citizens of the republic, may well be seriously questioned. The fur seal-skins which a few years since could be bought of the natives of the Aleutian islands for a dollar apiece are now sold when dressed, throughout the United States, at *twenty-five* dollars each and upwards.

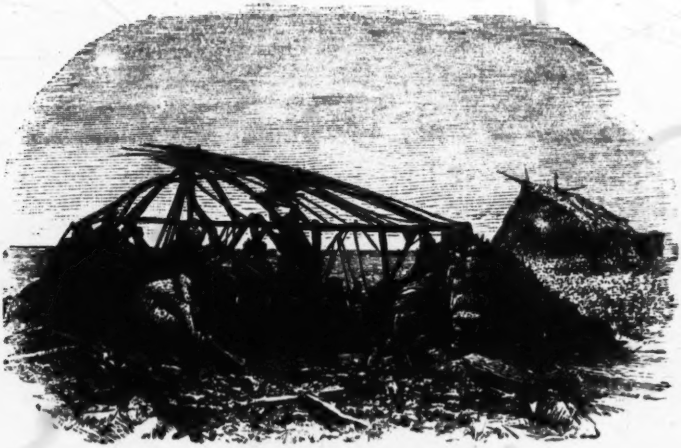
The fur-seal of Alaska is not found in any other part of America. The seal so numerous off the coast of Newfoundland and vicinity, taken on the ice by fleets of steamers and vessels annually, are the common hair seal, brown and spotted—the skin and oil of each being worth only about three dollars.

The population of Alaska is estimated at fifty thousand, less than two thousand of whom are white. On the cession of the country to the United States nearly all the Russian population left the country for St. Petersburg and Siberia; but a few, however, still remain in the country. The Indian tribes composing the population are numerous, but are generally of a docile and submissive nature. So long have they been under the dominion of the Russian American Fur Company and the Greek church priests, that *submission* has become a fixed part of their conduct. Few locate permanently, but in the interior live by the chase, and on the coast are largely employed in killing walrus, sea-otter, fur-seals, and fish. On the coast and islands they all belong to the Greek church, and Russian and native priests attend to their spiritual wants and afford them some degree of education. The physical type and social qualities of the Japanese are strongly marked in many of the coast natives, from whom many of them, doubtless, have descended. The islands are generally barren rocks with but scant timber or vegetation, the natives living chiefly on rye and coarse bread furnished them by the fur-seal companies, seal-meat, and fish. The Alaska Commercial Company in possession of St. George and St. Paul have made some effort to maintain schools among the natives; but whether or not the condition of the natives (so called) under this monopoly is not a species of slavery of American citizens is a subject worthy the closest investigation and study of the national government.

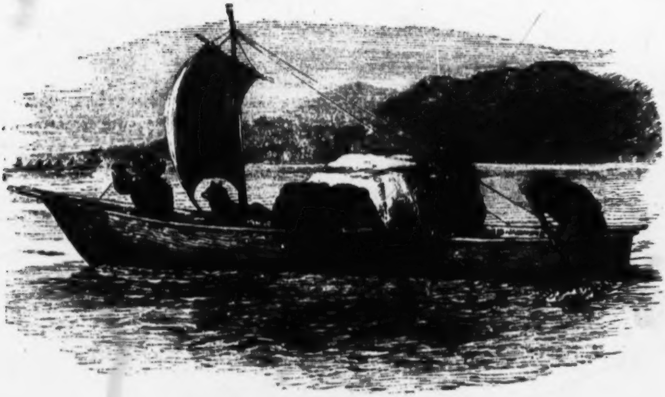
So far, no towns of any importance have been built in Alaska. Sitka, known as New Archangel, a little village of a dozen frail tenements, was the ancient head-quarters of the Russians in Russian America. It is built on one of the islands of the coast, about nine degrees north of Queen Charlotte island, in the group discovered by Tschirikoff, Behring's associate, in 1741. It is geographically situated in latitude 57° 2′ 45″ north, longitude 135° 17′ 10″ west, and, although so far north, the weather is never cold, the thermometer rarely marking lower than 20° above Fahrenheit. The town is built on a low belt of land close to the shore, with the residence of the former Russian governor, a clumsy wooden building, standing upon a rock about one hundred feet above the other houses. The country in the vicinity is a succession of high hills densely wooded, and snow-capped mountains. On Crooze island, opposite the town, is Mount Edgcumbe, an extinct volcano, rising eight thousand feet above the sea.

Sitka has made no progress in the last half century, and with the exception of a few soldiers, and the United States custom officers, a few traders and Indians, and the old Russian Greek church, there is little to indicate settlement. There are no roads, either on the islands or mainland. The country has not yet been organized under a territorial government, and with the exception of the fishing interest being developed, there are little signs of material improvement; and Sitka, with its dilapidated wharf, ancient Russian fort, old storehouses, houses painted yellow with iron roofs painted red, the old Russian hulks of ships on the shore propped up and roofed over, and the green dome of the old Greek church, with a few lounging soldiers and sleepy officers, an unemployed "collector," who has no customs to collect, an empty post-office, bands of half-nude Indians, troops of wolf-dogs, and *ninety inches* of rain per annum, makes Sitka, as a place, very desirable to *leave*. A newspaper, *The Alaska Herald*, (supposed to be published in Alaska,) intended to represent the interests of Alaska and Siberia and the North Pacific coast generally, is issued at San Francisco. There are four post-offices in Alaska—one at Fort Tongass, one at Fort Wrangel, one at Kodiak, and one at Sitka. A steamer runs between San Francisco and Sitka, a distance of about one thousand six hundred miles, making a trip once a month; and vessels leave San Francisco occasionally for this port, which has, during the past twenty years, supplied California with ice, this being the only point south of that place on the coast where ice could be obtained. Since the building of railroads in California, however, the lakes in the Sierras supply the greater part of the ice used in California.

The extent and value of the fishing interests of the newly acquired territory are very great. Off the coast, besides the valuable fur-seals, vast banks of cod and halibut, extending over an area of thirty thousand square miles, exist in the eastern section of Behring sea and about the Aleutian islands and the Kodiak group; and of late years fleets of fishing vessels leave San Francisco in June of each year, and take cargoes of cod and halibut in these waters and in the waters on the Asiatic coast along the line of Siberia, all the way from Plover bay to the Ochotsk sea. In this latter region, and along the coast of Kamschatka at Petropaulovski, and even in the region of the Amoor river, fishermen and traders from California extend their operations, and among a class of active, industrious, and in many cases prosperous people resident in these quarters, find hearty welcome and reciprocity in trade. This



NATIVES HOUSEBUILDING, ALASKA.



SKIN CANOE AND INDIANS, ALASKA.

region, so easy of access to the commerce and enterprise of the Pacific coast, but so remote from the seat of power of the Czar at St. Petersburg, has long been a favorite prison for political offenders; consequently the present population is made up in great part of men of education, skill, and ambition, and in their new homes have lost none of their hatred of monarchy, and catch with eager hope every ray of liberty cast upon their remote shores by the flag that gives freedom to all in America.

The development of Alaska will not begin until the Northern Pacific railroad connects Puget sound with the East, and a thrifty and numerous population find their homes in the great cities yet to be built on the shores of the magnificent inland sea of Washington Territory. Then the whaling fleets of the North Pacific and the Arctic will winter in Puget sound, and vast fleets of American vessels will draw from the shores of Alaska the hidden treasures of the deep—whale, walrus, seal, cod, halibut, and salmon. Mines of gold and silver, once exhausted, never recuperate: the treasures of the seas are never diminished, but annually multiplied as the leaves of the forests.

In the rich treasure-vaults of the deep, where, on the now lonely shores of Alaska, the illusive *mirage* paints its wondrous panorama, and the *aurora borealis* lights northern skies, will the future populous cities of the Pacific draw untold wealth, and fleets of American ships find employment; and on the placid waters of the Northern Pacific will the American seaman find a welcome refuge from the gales and winter frosts of the Atlantic seaboard.

# CHAPTER XL.

## APPENDIX.

Population of the United States: native, foreign, colored, and Chinese—Population of the Pacific coast: native, foreign, and Chinese—Population by *counties* of California, Oregon, Nevada, Utah, Arizona, Idaho, Washington Territory: also, aggregate of Alaska and British Columbia—Chinese in the United States and on the Pacific coast—Distances from San Francisco to various points inland and to various ports and countries and cities of the United States.

### POPULATION OF THE UNITED STATES—1870,

Including all the States and Territories. Aggregate, 38,555,983. Native, 32,989,434; foreign, 5,566,546; colored, 4,880,009; Chinese, 63,149; Japanese, 55.

### POPULATION OF THE PACIFIC COAST,

Embracing California, Oregon, Nevada, Utah, Arizona, Idaho, Washington Territory, British Columbia, and Alaska. Aggregate, 841,059. Native, exclusive of British Columbia and Alaska, 539,467; foreign, exclusive of British Columbia and Alaska, 289,652; Chinese on the Pacific coast, exclusive of British Columbia and Alaska, and embracing Montana, 60,765; in the remainder of the whole Union, 2,389.

### POPULATION OF CALIFORNIA—1870.

Total, 560,247. Native, 350,416; foreign, 209,831.
Representing the States and countries as follows:

*Native*—Alabama, 1,257; Arkansas, 2,396; California, 163,653; Connecticut, 2,977; Delaware, 408; Florida, 134; Georgia, 1,024; Illinois, 10,689; Indiana, 5,190; Iowa, 5,367; Kansas, 279; Kentucky, 6,605; Louisiana, 1,979; Maine, 11,261; Maryland, 2,596; Massachusetts, 15,334; Michigan, 3,032; Minnesota, 461; Mississippi, 994; Missouri, 16,050; Nebraska, 237; Nevada, 1,089; New Hampshire, 2,720; New Jersey, 2,598; New York, 33,766; North Carolina, 1,640; Ohio, 12,735; Oregon, 2,471; Pennsylvania, 11,208; Rhode Island, 1,419; South Carolina, 851; Tennessee, 4,686; Texas, 1,886; Vermont, 3,500; Virginia and West Virginia, 5,293; Wisconsin, 3,088; Alaska, 28; Arizona, 93; Colorado, 60; Dakota, 7; District of Columbia, 458; Idaho, 84; Indian Territory, 19; Montana, 65; New Mexico, 175; Utah, 850; Washington, 206; Wyoming, 21. *Colored*, 4,272

The *foreign* population represents the nations of the earth as follows: Africa, 48; Asia, 56; Atlantic islands, 943; Australia, 1,593; Austria, 1,078; Belgium, 291; Bohemia, 90; Canada, 6,977; China, 48,823; New Brunswick, 1,170; Newfoundland, 72; Nova Scotia, 1,438; Prince Edward island, 54; British America, (not specified,) 949; Central America, 124; Cuba, 45; Denmark, 1,837; France, 8,068; Germany, 28,700—as follows: Baden, 2,143; Bavaria, 2,547; Brunswick, 61; Hamburg, 934; Hanover, 2,555; Hessen, 1,500; Lubec, 12; Mecklenburg, 95; Nassau, 49; Oldenburg, 110; Prussia, (not specified,) 14,782; Saxony, 622; Weimer, 9; Wurtemburg, 1,461; Germany, (not specified,) 2,820; England, 17,699; Ireland, 54,421; Scotland, 4,949; Wales, 1,517; Greece, 97: Greenland, 1; Holland, 452; Hungary, 102; India, 63; Italy, 4,660; Japan, 33; Luxemburg, 11; Malta, 5; Mexico, 9,309; Norway, 1,000; Pacific islands, 93; Poland, 804; Portugal, 2,507; Russia, 540; Sandwich islands, 279; South America, 1,940; Spain, 405; Sweden, 1,944; Switzerland, 2,927; Turkey, 17; West Indies, 340.

## POPULATION OF CALIFORNIA BY COUNTIES—1870.

| COUNTIES. | Totals. | Native. | Foreign. | White. | Colored. | Indian. | Chinese. | COUNTY-SEAT. |
|---|---|---|---|---|---|---|---|---|
| Alameda | 24,237 | 14,382 | 9,855 | 22,106 | 86 | 111 | 1,933 | San Leandro. |
| Alpine | 685 | 485 | 200 | 676 | 1 | .... | 8 | Silver Mountain. |
| Amador | 9,582 | 5,449 | 4,133 | 7,870 | 81 | .... | 1,641 | Jackson. |
| Butte | 11,403 | 7,428 | 3,975 | 9,185 | 84 | 40 | 2,094 | Oroville. |
| Calaveras | 8,895 | 4,677 | 4,218 | 7,400 | 45 | 18 | 1,432 | San Andreas. |
| Colusa | 6,165 | 5,088 | 1,077 | 5,389 | 81 | 424 | 271 | Colusa. |
| Contra Costa | 8,461 | 5,791 | 2,670 | 8,271 | 21 | 9 | 160 | Martinez. |
| Del Norte | 2,022 | 1,580 | 442 | 1,009 | 22 | 774 | 217 | Crescent City. |
| El Dorado | 10,309 | 6,287 | 4,022 | 8,589 | 133 | 6 | 1,581 | Placerville. |
| Fresno | 6,336 | 4,972 | 1,364 | 3,259 | 15 | 2,635 | 427 | Millerton. |
| Humboldt | 6,140 | 4,646 | 1,494 | 6,025 | .... | 76 | 39 | Eureka. |
| Inyo | 1,956 | 1,164 | 792 | 1,608 | 87 | 232 | 29 | Independence. |
| Kern | 2,925 | 2,157 | 768 | 2,193 | 4 | 585 | 143 | Havilah. |
| Klamath | 1,674 | 783 | 891 | 1,069 | 2 | 61 | 542 | Orleans Bar. |
| Lake | 2,969 | 2,483 | 486 | 2,825 | 8 | 17 | 119 | Lakeport. |
| Lassen | 1,327 | 1,178 | 149 | 1,309 | .... | 1 | 17 | Susanville. |
| Los Angeles | 15,309 | 10,984 | 4,325 | 14,720 | 134 | 219 | 236 | Los Angeles. |
| Marin | 6,903 | 3,761 | 3,142 | 6,394 | 22 | 126 | 361 | San Rafael. |
| Mariposa | 4,572 | 2,192 | 2,380 | 3,344 | 116 | 8 | 1,104 | Mariposa. |
| Mendocino | 7,545 | 6,146 | 1,399 | 6,865 | 9 | 542 | 129 | Ukiah. |
| Merced | 2,807 | 2,196 | 611 | 2,548 | 37 | 36 | 186 | Snelling. |
| Mono | 430 | 305 | 125 | 386 | .... | 2 | 42 | Bridgeport. |
| Monterey | 9,876 | 7,670 | 2,206 | 9,428 | 15 | 203 | 230 | Monterey. |
| Napa | 7,163 | 5,394 | 1.769 | 6,725 | 112 | 66 | 260 | Napa City. |
| Nevada | 19,134 | 10,479 | 8,655 | 16,334 | 162 | 9 | 2,629 | Nevada City. |
| Placer | 11,357 | 6,167 | 5,190 | 8,850 | 99 | 1 | 2,407 | Auburn. |
| Plumas | 4,489 | 2,414 | 2,075 | 3.571 | 2 | 5 | 911 | Quincy. |
| Sacramento | 26,830 | 16,228 | 10,602 | 22,725 | 479 | 28 | 3,598 | Sacramento. |
| San Bernardino | 3,988 | 3,328 | 660 | 3,964 | 8 | .... | 16 | San Bernardino. |
| San Diego | 4.951 | 3,743 | 1,208 | 4,838 | 15 | 28 | 70 | San Diego. |
| San Francisco | 149,473 | 75,753 | 73,720 | 136,059 | 1,341 | 55 | 12,018 | San Francisco. |
| San Joaquin | 21,050 | 14,824 | 6,226 | 19,192 | 230 | .... | 1,628 | Stockton. |
| San Luis Obispo | 4,772 | 3,833 | 939 | 4,567 | 9 | 137 | 59 | San Luis Obispo. |
| San Mateo | 6,635 | 3,497 | 3,138 | 6,099 | 10 | 7 | 519 | Redwood City. |
| Santa Barbara | 7,784 | 6,538 | 1,246 | 7,483 | 109 | 163 | 29 | Santa Barbara. |

## POPULATION OF CALIFORNIA BY COUNTIES—*Continued.*

| COUNTIES. | Totals. | Native. | Foreign. | White. | Colored. | Indian. | Chinese. | COUNTY-SEAT. |
|---|---|---|---|---|---|---|---|---|
| Santa Clara | 26,246 | 17,241 | 9,005 | 24,537 | 179 | 12 | 1,518 | San Jose. |
| Santa Cruz | 8,743 | 6,758 | 1,985 | 8,532 | 53 | 2 | 156 | Santa Cruz. |
| Shasta | 4,173 | 2,937 | 1,236 | 3,529 | 44 | 26 | 574 | Shasta. |
| Sierra | 5,619 | 2,816 | 2,803 | 4,781 | 29 | .... | 809 | Downieville. |
| Siskiyou | 6,848 | 4,321 | 2,527 | 5,312 | 32 | 47 | 1,457 | Yreka. |
| Solano | 16,871 | 11,263 | 5,608 | 15,871 | 78 | 3 | 919 | Fairfield. |
| Sonoma | 19,819 | 15,656 | 4,163 | 19,184 | 80 | 82 | 473 | Santa Rosa. |
| Stanislaus | 6,499 | 5,147 | 1,352 | 6,189 | 4 | .... | 306 | Modesto. |
| Sutter | 5,030 | 3,949 | 1,081 | 4,791 | 31 | .... | 208 | Yuba City. |
| Tehama | 3,587 | 2,834 | 753 | 3,166 | 146 | .... | 275 | Red Bluff. |
| Trinity | 3,213 | 1,398 | 1,815 | 1,950 | 29 | 139 | 1,095 | Weaverville. |
| Tulare | 4,521 | 3,967 | 554 | 4,379 | 39 | 4 | 99 | Visalia. |
| Tuolumne | 8,150 | 4,182 | 3,968 | 6,540 | 68 | 3 | 1,539 | Sonora. |
| Yolo | 9,899 | 7,778 | 2,121 | 9,321 | 69 | 117 | 392 | Woodland. |
| Yuba | 10,851 | 6,144 | 4,707 | 8,367 | 151 | .... | 2,333 | Marysville. |
| Totals | 560,223 | 350,393 | 209,830 | 499,324 | 4,611 | 7,059 | 49,229 | |

## POPULATION OF OREGON—1870.

Total, 90,923. Native, 79,323; foreign, 11,600.

Representing principally the States and countries as follows:

*Native*—Arkansas, 491; California, 1,674; Connecticut, 263; Illinois, 4,722; Indiana, 3,451; Iowa, 3,695; Kentucky, 2,387; Maine, 676; Maryland, 330; Massachusetts, 756; Michigan, 466; Missouri, 7,061; New Hampshire, 219; New York, 3,092; North Carolina, 457; Ohio, 4,031; Oregon, 36,932; Pennsylvania, 1,921; Tennessee, 1,544; Vermont, 432; Virginia, 1,447; Wisconsin, 434; Idaho, 144; Washington, 592. *Colored*, 346.

*Foreign*—China, 3,326; Canada, 877; Nova Scotia, 86; British America, (not specified,) 124; France, 308; Germany, 1,875; England, 1,347; Ireland, 1,967; Scotland, 394; Italy, 31; Mexico, 51; Norway, 76; Poland, 65; Portugal, 48; Russia, 67; Sweden, 205; Switzerland, 160.

| COUNTIES. | TOTALS. | NATIVE. | FOREIGN. | CHINESE. |
|---|---|---|---|---|
| Baker | 2,804 | 1,757 | 1,047 | 679 |
| Benton | 4,584 | 4,341 | 243 | |
| Clackamas | 5,993 | 5,436 | 557 | 50 |
| Clatsop | 1,255 | 952 | 303 | 13 |
| Columbia | 863 | 744 | 119 | |
| Coos | 1,644 | 1,255 | 389 | 13 |
| Curry | 504 | 426 | 78 | 12 |
| Douglas | 6,066 | 5,684 | 382 | 76 |
| Grant | 2,251 | 1,001 | 1,250 | 939 |
| Jackson | 4,778 | 3,721 | 1,057 | 634 |

## POPULATION OF OREGON—*Continued.*

| COUNTIES. | TOTALS. | NATIVE. | FOREIGN. | CHINESE. |
|---|---|---|---|---|
| Josephine | 1,204 | 817 | 387 | 223 |
| Lane | 6,426 | 6,291 | 135 | 7 |
| Linn | 8,717 | 8,474 | 243 | 2 |
| Marion | 9,964 | 9,049 | 916 | 27 |
| Multnomah | 11,510 | 8,425 | 3,085 | 506 |
| Polk | 4,701 | 4,573 | 128 | 2 |
| Tillamook | 408 | 380 | 28 | |
| Umatilla | 2,916 | 2,692 | 224 | 70 |
| Union | 2,552 | 2,338 | 214 | 45 |
| Wasco | 2,509 | 2,131 | 378 | 28 |
| Washington | 4,261 | 4,038 | 223 | |
| Yamhill | 5,012 | 4,798 | 214 | 1 |

## POPULATION OF NEVADA—1870.

Total, 42,491. Native, 23,690; foreign, 18,801.

Representing principally the States and countries as follows:

*Native*—California, 2,360; Illinois, 1,141; Indiana, 520; Kentucky, 603; Maine, 1,083; Massachusetts, 998; Missouri, 1,053; Nevada, 3,352; New York, 3,265; Ohio, 1,858; Pennsylvania, 1,458; Virginia, 551; Utah, 954. *Colored*, 357.

*Foreign*—Austria, 157; Canada, 1,952; China, 3,143; Nova Scotia, 231; Germany, 2,181; England, 2,549; Ireland, 5,035; Scotland, 630; Wales, 301; Italy, 199; Mexico, 225; Sweden, 217; Switzerland, 247.

| COUNTIES. | TOTALS. | NATIVE. | FOREIGN. | CHINESE. |
|---|---|---|---|---|
| Churchill | 196 | 140 | 56 | 16 |
| Douglas | 1,215 | 791 | 424 | 23 |
| Elko | 3,447 | 2,054 | 1,393 | 439 |
| Esmeralda | 1,553 | 1,065 | 488 | 56 |
| Humboldt | 1,916 | 1,065 | 851 | 220 |
| Oander | 2,815 | 1,580 | 1,235 | 218 |
| Wincoln | 2,985 | 2,148 | 837 | 23 |
| Nyon | 1,837 | 893 | 944 | 116 |
| Lrye | 1,087 | 760 | 327 | 6 |
| Stomsby | 3,668 | 1,760 | 1,908 | 767 |
| Wop | 133 | 108 | 25 | 4 |
| oLry | 11,359 | 5,557 | 5,802 | 745 |
| Rashoe | 3,091 | 1,997 | 1,094 | 221 |
| Lhite Pine | 7,189 | 3,772 | 3,417 | 292 |

## POPULATION OF UTAH—1870.

Total, 86,786. Native, 56,084; foreign, 30,702.

Representing principally the States and countries as follows:

*Native*—Alabama, 145; California, 308; Connecticut, 234; Illinois, 2,105; Indiana, 399; Iowa, 1,492; Kentucky, 317; Maine, 239; Massachusetts, 492; Michigan, 228; Mississippi, 125; Missouri, 908; Nebraska, 272; New Hampshire, 165; New Jersey, 322; New York, 2,247; North Carolina, 215; Ohio, 1,133; Pennsylvania, 1,315; Tennessee, 405; Texas, 104; Vermont, 325; Virginia, 287; Wisconsin, 117; Utah, 41,250. *Colored*, 118.

*Foreign*—Australia, 74; Africa, (white,) 128; China, 445; Canada, 566; New Brunswick and Nova Scotia, 111; Denmark, 4,956; France, 63; Prussia, 152; Germany, 206; England, 16,073; Ireland, 502; Scotland, 2,391; Wales, 1,783; Holland, 122; Italy, 74; Norway, 613; Russia, 13; Sweden, 1,790; Switzerland, 509.

| COUNTIES. | TOTALS. | NATIVE. | FOREIGN. | CHINESE. |
|---|---|---|---|---|
| Beaver | 2,007 | 1,405 | 602 | |
| Box Elder | 4,855 | 2,795 | 2,060 | 403 |
| Cache | 8,229 | 5,121 | 3,108 | |
| Davis | 4,459 | 3,010 | 1,449 | |
| Iron | 2,277 | 1,610 | 667 | |
| Juba | 2,034 | 1,344 | 690 | |
| Kane | 1,513 | 1,292 | 221 | |
| Millard | 2,753 | 1,974 | 779 | |
| Morgan | 1,972 | 1,215 | 757 | |
| Piute | 82 | 54 | 28 | |
| Rich | 1,955 | 1,291 | 664 | |
| Rio Virgin | 450 | 368 | 82 | |
| Salt Lake | 18,337 | 10,894 | 7,443 | |
| San Pete | 6,786 | 3,890 | 2,869 | |
| Sevier | 19 | .... | 19 | |
| Summit | 2,512 | 1,448 | 1,064 | 39 |
| Tooele | 2,177 | 1,350 | 827 | |
| Utah | 12,203 | 8,439 | 3,764 | |
| Wasatch | 1,244 | 887 | 357 | |
| Washington | 3,064 | 2,455 | 609 | |
| Weber | 7,858 | 5,242 | 2,616 | 3 |

## POPULATION OF ALASKA—1870.

Estimated at 50,000 Indians and 2,000 whites.

AURORA BOREALIS, AS SEEN IN NORTHERN ALASKA.

## POPULATION OF ARIZONA—1870.

Total, 9,658. Native, 3,849; foreign, 5,809.

Representing principally the States and countries as follows:

*Native*—Arizona, 1,240; California, 156; New York, 481; Ohio, 235; Pennsylvania, 275. *Colored*, 26.

*Foreign*—Austria, 24; British America, 143, China, 20, Denmark, 19; England, 137; France, 69; Germany, 379; Ireland, 495; Scotland, 54; Sweden, 14; Switzerland, 23.

| COUNTIES. | TOTALS. | NATIVE. | FOREIGN. | CHINESE. |
|---|---|---|---|---|
| Mohave | 179 | 122 | 57 | |
| Pima | 5,716 | 1,900 | 3,816 | |
| Yavapai | 2,142 | 1,208 | 934 | 12 |
| Yuma | 1,621 | 619 | 1,002 | 8 |

## POPULATION OF IDAHO—1872.

Total, 14,999. Native, 7,114; foreign, 7,885.

Representing principally the States and countries as follows:

*Native*—Alabama, 26; Arkansas, 24; California, 230; Connecticut, 59; Georgia, 23; Illinois, 400; Indiana, 252; Iowa, 312; Kentucky, 243; Maine, 242; Maryland, 65; Massachusetts, 200; Michigan, 69; Missouri, 536; Nebraska, 27; New Hampshire, 54; New Jersey, 49; New York, 800; North Carolina, 44; Ohio, 550; Oregon, 347; Pennsylvania, 416; Tennessee, 109; Texas, 26; Vermont, 75; Virginia, 175; Wisconsin, 118; Idaho, 925; Utah, 478; Washington, 47. *Colored*—60.

*Foreign*—Atlantic islands, 71; Austria, 26; British America, 335; China, 4,267; Denmark, 88; France, 144; Germany, 599; England, 540; Ireland, 986; Scotland, 114; Wales, 335; Italy, 11; Mexico, 43; Norway, 61; Sweden, 91; Switzerland, 52.

| COUNTIES. | TOTALS. | NATIVE. | FOREIGN. | CHINESE. |
|---|---|---|---|---|
| Ada | 2,675 | 2,178 | 497 | 78 |
| Altures | 688 | 286 | 403 | 314 |
| Boise | 3,834 | 1,183 | 2,651 | 1,754 |
| Idaho | 849 | 205 | 644 | 425 |
| Lemhi | 988 | 509 | 479 | 120 |
| Nez Percés | 1,607 | 609 | 998 | 747 |
| Oneida | 1,922 | 1,189 | 733 | |
| Owyhee | 1,713 | 862 | 851 | 368 |
| Shoshone | 722 | 93 | 629 | 468 |

## POPULATION OF WASHINGTON TERRITORY—1870.

Total, 23,955. Native, 18,931; foreign, 5,024.
Representing principally the States and countries as follows:

*Native*—Arkansas, 98; California, 400; Connecticut, 120; Georgia, 24; Illinois, 967; Indiana, 806; Iowa, 749; Kansas, 34; Kentucky, 402; Louisiana, 59; Maine, 858; Maryland, 102; Massachusetts, 400; Michigan, 114; Minnesota, 63; Missouri, 946; Nebraska, 26; New Hampshire, 96; New Jersey, 86; New York, 1,097; North Carolina, 71; Ohio, 866; Oregon, 1,615; Pennsylvania, 527; Rhode Island, 54; South Carolina, 28; Tennessee, 196; Texas, 44; Vermont, 163; Virginia, 311; Wisconsin, 203; Idaho, 76; Montana, 44; Utah, 30; Washington, 5,964. *Colored*—207.

*Foreign*—Australia, 37; Austria, 19; British America, 970; China, 234; Denmark, 84; France, 113; Germany, 645; England, 791; Ireland, 1,097; Scotland, 309; Wales, 44; Holland, 25; Italy, 24; Mexico, 12; Norway, 104; Poland, 25.

| COUNTIES. | TOTALS. | NATIVE. | FOREIGN. | CHINESE. |
|---|---|---|---|---|
| Chehalis | 401 | 381 | 20 | |
| Clallam | 408 | 274 | 134 | 2 |
| Clarke | 3,081 | 2,606 | 475 | |
| Cowlitz | 730 | 645 | 85 | 1 |
| Island | 626 | 400 | 226 | 7 |
| Jefferson | 1,268 | 690 | 578 | 19 |
| King | 2,120 | 1,605 | 515 | 33 |
| Kitsap | 866 | 434 | 432 | 13 |
| Klikitat | 329 | 289 | 40 | |
| Lewis | 888 | 779 | 109 | 1 |
| Mason | 289 | 225 | 64 | 1 |
| Pacific | 738 | 591 | 147 | 6 |
| Pierce | 1,409 | 1,144 | 265 | 7 |
| Skamania | 133 | 108 | 25 | |
| Snohomish | 599 | 413 | 186 | 3 |
| Stevens | 734 | 488 | 246 | 42 |
| Thurston | 2,246 | 1,931 | 315 | 19 |
| Wahkiakum | 270 | 190 | 80 | 15 |
| Walla Walla | 5,300 | 4,692 | 603 | 42 |
| Whatcom | 534 | 341 | 193 | 21 |
| Wakima | 432 | 410 | 22 | |
| Island of San Juan | 554 | 295 | 259 | 2 |

## POPULATION OF BRITISH COLUMBIA—1870.

Estimated at 50,000 Indians and 10,000 whites.

## DISTANCES FROM SAN FRANCISCO TO VARIOUS POINTS INLAND.

| | Miles. | | Miles. | | Miles. |
|---|---|---|---|---|---|
| Alameda | 9 | Humboldt Lake | 345 | San Andreas | 170 |
| Alviso | 46 | Jackson | 185 | San Bernardino | 500 |
| Alta | 186 | Lake Tahoe | 228 | San Juan South | 94 |
| Auburn | 152 | Lone Mountain | 3 | San Jose | 51 |
| Austin | 437 | Los Angeles | 480 | San Leandro | 15 |
| Benicia | 30 | Lower Lake | 120 | San Mateo | 20 |
| Big Trees | 198 | Mariposa | 211 | San Quentin | 12 |
| Bridgeport | 289 | Marysville | 171 | San Rafael | 12 |
| Carson City | 255 | Martinez | 33 | Santa Clara | 47 |
| Cisco | 209 | Mare Island | 28 | Seal Rock | 6 |
| Colfax | 171 | Millerton | 175 | Silver Mountain | 257 |
| Colusa | 192 | Mokelumne Hill | 180 | Snelling | 187 |
| Copperopolis | 155 | Mountain View | 38 | Sonora | 187 |
| Crystal Springs | 23 | Monte Diablo | 44 | Sonoma | 52 |
| Diamond Springs | 164 | Napa | 50 | Stockton | 117 |
| Downieville | 232 | Nevada | 182 | Suisun | 50 |
| Dutch Flat | 184 | New Castle | 148 | Sutterville | 114 |
| Eureka | 230 | New Almaden | 67 | Vallejo | 28 |
| Fairfield | 50 | Oakland | 7 | Visalia | 308 |
| Folsom | 139 | Oroville | 196 | Warm Springs | 37 |
| Fort Yuma | 732 | Pacheco | 38 | Weaverville | 365 |
| Fort Point | 4 | Petaluma | 48 | White Sulp. Springs, | 67 |
| Genoa | 141 | Pino | 142 | Willow Springs | 686 |
| Geyser Springs | 118 | Placerville | 167 | Woodbridge | 85 |
| Goat Island | 1½ | Red Bluff | 247 | Yosemite Valley | 247 |
| Great Salt Lake City, | 827 | Redwood | 31 | Yreka | 400 |
| Havilah | 450 | Rio Vista | 73 | Yuba City | 167 |
| Haywards | 19 | Ruby Valley | 440 | | |
| Healdsburg | 80 | Sacramento | 117 | | |

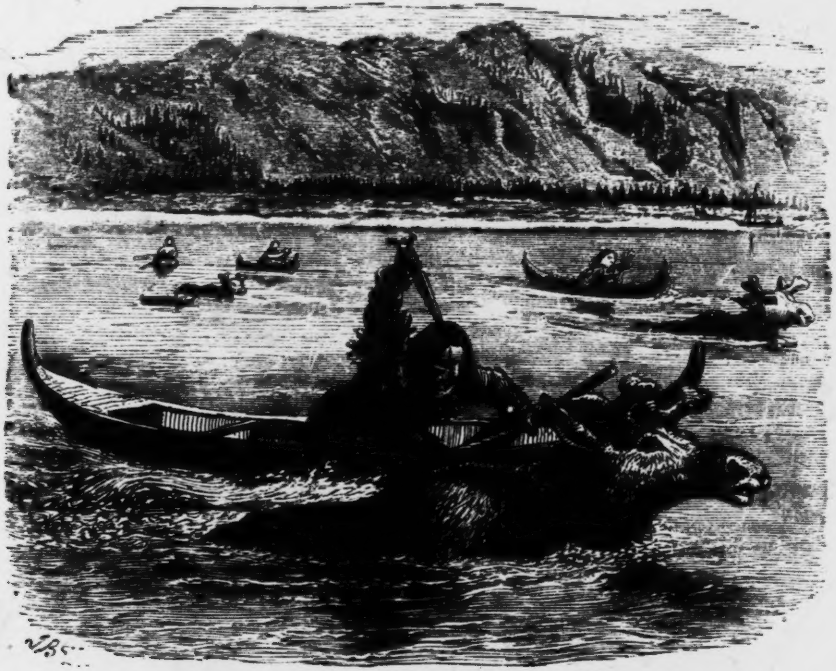
## DISTANCES FROM SAN FRANCISCO TO VARIOUS PORTS.

| | Miles. | | Miles. |
|---|---|---|---|
| Acapulco, Mexico | 1,840 | New York, via Cape Horn | 14,000 |
| Anaheim, California | 312 | New York, via Panama | 5,287 |
| Calcutta, via Honolulu | 11,380 | Panama, New Grenada | 3,260 |
| Callao, Peru | 4,010 | Rio Janeiro, Brazil | 8,320 |
| Canton, via Honolulu | 7,097 | San Blas, Mexico | 1,470 |
| Cape San Lucas, Mexico | 1,450 | San Diego, California | 450 |
| Guaymas, “ | 1,530 | San Pedro, “ | 380 |
| Half Moon Bay, California | 46 | San Buenaventura, California | 325 |
| Hong Kong, via Honolulu | 7,000 | San Luis Obispo, “ | 205 |
| Honolulu, Hawaiian Islands | 2,080 | Santa Barbara, “ | 292 |
| Jeddo, Japan | 5,000 | San Simeon, “ | 165 |
| Kanagawa, Japan | 5,000 | Santa Cruz, “ | 64 |
| La Paz, Mexico | 1,300 | Shanghai, via Honolulu | 6,740 |
| Liverpool, via Cape Horn | 13,100 | Sydney, via Honolulu | 6,700 |
| Manzanillo, Mexico | 1,550 | Tahiti, Society islands | 4,490 |
| Mazatlan, “ | 1,390 | Valparaiso, Chili | 5,300 |
| Melbourne, via Honolulu | 7,160 | Yokohama, via Honolulu | 5,580 |
| Monterey, California | 86 | | |

## DISTANCES FROM SAN FRANCISCO TO VARIOUS POINTS VIA CENTRAL AND UNION PACIFIC RAILROADS AND THEIR CONNECTIONS.

San Francisco to Chicago, 2,406; St. Louis, 2,388; Baltimore, 3,232; Philadelphia, 3,230; New York, 3,300; Boston, 3,540.

| West from Omaha. | | | East from San Francisco. |
|---|---|---|---|
| Elevation. | Distance. | | |
| 966 | | Omaha | 1,914 |
| 1,686 | 132 | Lone Tree | 1,782 |
| 1,850 | 154 | Grand Island | 1,760 |
| 2,789 | 291 | North Platte | 1,623 |
| 3,500 | 377 | Julesburg | 1,537 |
| 4,073 | 414 | Sidney | 1,500 |
| 6,041 | 516 | Cheyenne | 1,398 |
| 8,242 | 549 | Sherman, (summit of Rocky mountains) | 1,365 |
| 7,123 | 578 | Laramie | 1,341 |
| 6,550 | 645 | Medicine Bow | 1,269 |
| 6,732 | 709 | Rawlings | 1,205 |
| 6,685 | 785 | Bitter Creek | 1,129 |
| 6,340 | 858 | Bryan | 1,056 |
| 6,879 | 966 | Wahsatch | 948 |
| 4,340 | 1,032 | Ogden, (head of Salt lake) | 882 |
| 4,905 | 1,084 | Promontory | 830 |
| 5,970 | 1,214 | Toano | 700 |
| 4,903 | 1,330 | Carlin | 584 |
| 4,508 | 1,391 | Battle Mountain | 523 |
| 4,331 | 1,451 | Winnemucca | 463 |
| 4,077 | 1,587 | Wadsworth | 327 |
| 4,507 | 1,622 | Reno | 292 |
| 5,845 | 1,656 | Truckee | 258 |
| 7,017 | 1,671 | Summit (of the Sierra Nevadas) | 243 |
| 5,939 | 1,684 | Cisco | 230 |
| 3,612 | 1,707 | Alta | 207 |
| 2,421 | 1,722 | Colfax | 192 |
| 30 | 1,775 | Sacramento | 117 |
| 23 | 1,822 | Stockton | 90 |
| 48 | 1,897 | San Leandro | 15 |
| 12 | 1,908 | Brooklyn | 8 |
| 11 | 1,911 | Oakland Wharf | 3 |
| | 1,914 | San Francisco. | |



MOOSE-HUNTING IN THE YUKON RIVER, ALASKA.

## DISTANCES ON THE COAST NORTH FROM SAN FRANCISCO—SHORTEST SAILING ROUTE IN NAUTICAL MILES.

| | MILES. |
|---|---|
| Bolinas Point, Cal............... | 19 |
| Point Reyes, “ ............. | 36 |
| Tomales, “ ............. | 45 |
| Bodega Point, “ ............. | 54 |
| Point Arenas, “ ............. | 105 |
| Mendocino City, “ ............. | 126 |
| Point Gordo, “ ............. | 188 |
| Cape Mendocino, “ ............. | 201 |
| False Cape, “ ............. | 206 |
| Table Bluff, “ ............. | 217 |
| Humboldt Bar, “ ............. | 223 |
| Trinidad Head, “ ............. | 241 |
| Crescent City, “ ............. | 283 |
| Rogue river, Oregon.......... | 325 |
| Port Orford, “ ......... | 345 |
| Cape Blanco, “ ......... | 356 |
| Cape Arago, “ ......... | 387 |
| Umpqua, “ ......... | 410 |
| Cape Perpetua, “ ......... | 447 |
| Cape Foulweather, “ ......... | 474 |
| Cape Lookout, “ ......... | 510 |
| False Tallamook, Oregon......... | 536 |
| Tallamook Head, “ ......... | 547 |
| Astoria, “ ......... | 560 |
| Cape Disappointment “ ......... | 567 |
| Vancouver, Washington Terr.... | 635 |
| Portland, Oregon.................... | 670 |
| Port Angeles, Washington Terr.. | 740 |
| Victoria, Vancouver island........ | 746 |
| Esquimalt, “ ....... | 760 |
| Port Townsend, Washington T.. | 770 |
| Bellingham bay, “ .. | 800 |
| Seattle, “ .. | 810 |
| New Westminster, British Col... | 815 |
| Steilacoom, Washington Terr.... | 840 |
| Olympia, “ .... | 860 |
| New Archangel, Sitka island..... | 1,290 |
| Sitka, Alaska......................... | 1,480 |
| Kodiak, “ ......................... | 2,030 |
| Onalaska “ ......................... | 2,591 |
| St. Paul's island, Alaska........... | 2,821 |
| Cape Prince of Wales............. | 3,341 |

## CENSUS OF CITIES—1870.

**The following table contains the population of each of the one hundred and thirty-four largest cities in the United States. It shows all the cities having a population of ten thousand and upward:**

| City. | State. | Populat'n. |
|---|---|---|
| 1. New York | New York | 942,292 |
| 2. Philadelphia | Pennsylvania | 674,022 |
| 3. Brooklyn | New York | 396,099 |
| 4. St. Louis | Missouri | 310,864 |
| 5. Chicago | Illinois | 298,977 |
| 6. Baltimore | Maryland | 267,354 |
| 7. Boston | Massachusetts | 250,526 |
| 8. Cincinnati | Ohio | 216,239 |
| 9. New Orleans | Louisiana | 191,418 |
| 10. San Francisco | California | 149,473 |
| 11. Buffalo | New York | 117,714 |
| 12. Washington | District Columbia | 109,199 |
| 13. Newark | New Jersey | 105,059 |
| 14. Louisville | Kentucky | 100,753 |
| 15. Cleveland | Ohio | 92,829 |
| 16. Pittsburg | Pennsylvania | 86,076 |
| 17. Jersey City | New Jersey | 82,546 |
| 18. Detroit | Michigan | 79,577 |
| 19. Milwaukee | Wisconsin | 71,440 |
| 20. Albany | New York | 69,422 |
| 21. Providence | Rhode Island | 68,904 |
| 22. Rochester | New York | 62,386 |
| 23. Alleghany | Pennsylvania | 53,180 |
| 24. Richmond | Virginia | 51,038 |
| 25. New Haven | Connecticut | 50,840 |
| 26. Charleston | South Carolina | 48,956 |
| 27. Indianapolis | Indiana | 48,244 |
| 28. Troy | New York | 46,465 |
| 29. Syracuse | New York | 43,051 |
| 30. Worcester | Massachusetts | 41,105 |
| 31. Lowell | Massachusetts | 40,928 |
| 32. Memphis | Tennessee | 40,226 |
| 33. Cambridge | Massachusetts | 39,684 |
| 34. Hartford | Connecticut | 37,180 |
| 35. Scranton | Pennsylvania | 35,092 |
| 36. Reading | Pennsylvania | 33,930 |
| 37. Paterson | New Jersey | 33,579 |
| 38. Kansas City | Missouri | 32,260 |
| 39. Mobile | Alabama | 32,034 |
| 40. Toledo | Ohio | 31,584 |
| 41. Portland | Maine | 31,419 |
| 42. Columbia | Ohio | 31,274 |
| 43. Wilmington | Delaware | 30,841 |
| 44. Dayton | Ohio | 30,473 |
| 45. Lawrence | Massachusetts | 28,921 |
| 46. Utica | New York | 28,804 |
| 47. Charlestown | Massachusetts | 28,323 |
| 48. Savannah | Georgia | 28,235 |
| 49. Lynn | Massachusetts | 28,233 |
| 50. Fall River | Massachusetts | 26,768 |
| 51. Springfield | Massachusetts | 26,703 |
| 52. Nashville | Tennessee | 25,865 |
| 53. Covington | Kentucky | 24,505 |
| 54. Quincy | Illinois | 24,052 |
| 55. Manchester | New Hampshire | 23,536 |
| 56. Harrisburg | Pennsylvania | 23,104 |
| 57. Peoria | Illinois | 22,849 |
| 58. Evansville | Indiana | 21,830 |
| 59. Atlanta | Georgia | 21,789 |
| 60. Lancaster | Pennsylvania | 21,295 |
| 61. Oswego | New York | 20,910 |
| 62. Elizabeth | New Jersey | 20,832 |
| 63. Hoboken | New Jersey | 20,297 |
| 64. Poughkeepsie | New York | 20,080 |
| 65. Davenport | Iowa | 20,038 |
| 66. St. Paul | Minnesota | 20,030 |
| 67. Erie | Pennsylvania | 19,646 |
| 68. St. Joseph | Missouri | 19,566 |
| 69. Wheeling | West Virginia | 19,280 |
| 70. Norfolk | Virginia | 19,229 |
| 71. Bridgeport | Connecticut | 18,969 |
| 72. Petersburg | Virginia | 18,950 |
| 73. Chelsea | Massachusetts | 18,547 |
| 74. Dubuque | Iowa | 18,434 |
| 75. Bangor | Maine | 18,289 |
| 76. Leavenworth | Kansas | 17,873 |
| 77. Fort Wayne | Indiana | 17,718 |
| 78. Springfield | Illinois | 17,364 |
| 79. Auburn | New York | 17,225 |
| 80. Newburg | New York | 17,014 |
| 81. Norwich | Connecticut | 16,653 |
| 82. Grand Rapids | Michigan | 16,507 |
| 83. Sacramento | California | 16,283 |
| 84. Terre Haute | Indiana | 16,103 |
| 85. Omaha | Nebraska | 16,083 |
| 86. Williamsport | Pennsylvania | 16,030 |
| 87. Elmira | New York | 15,863 |
| 88. New Albany | Indiana | 15,395 |
| 89. Augusta | Georgia | 15,389 |
| 90. Cohoes | New York | 15,357 |
| 91. Newport | Kentucky | 15,087 |
| 92. Burlington | Iowa | 14,930 |
| 93. Lexington | Kentucky | 14,801 |
| 94. Burlington | Vermont | 14,387 |
| 95. Galveston | Texas | 13,818 |
| 96. Lewiston | Maine | 13,600 |
| 97. Alexandria | Virginia | 13,570 |
| 98. Lafayette | Indiana | 13,506 |
| 99. Wilmington | North Carolina | 13,446 |
| 100. Haverhill | Massachusetts | 13,092 |
| 101. Minneapolis | Minnesota | 13,066 |
| 102. Sandusky | Ohio | 13,000 |
| 103. Salt Lake | Utah | 12,854 |
| 104. Keokuk | Iowa | 12,766 |
| 105. Fond du Lac | Wisconsin | 12,764 |
| 106. Binghampton | New York | 12,692 |
| 107. Oshkosh | Wisconsin | 12,662 |
| 108. Vicksburg | Mississippi | 12,443 |
| 109. San Antonio | Texas | 12,256 |
| 110. Concord | New Hampshire | 12,241 |
| 111. Des Moines | Iowa | 12,035 |
| 112. Jackson | Michigan | 11,447 |
| 113. Georgetown | District Columbia | 11,384 |
| 114. Aurora | Illinois | 11,162 |
| 115. Hamilton | Ohio | 11,081 |
| 116. Rockford | Illinois | 11,046 |
| 117. Schenectady | New York | 11,026 |
| 118. Rome | New York | 11,000 |
| 119. Waterbury | Connecticut | 10,826 |
| 120. Macon | Georgia | 10,810 |
| 121. Madison | Indiana | 10,709 |
| 122. Altoona | Pennsylvania | 10,600 |
| 123. Portsmouth | Ohio | 10,592 |
| 124. Montgomery | Alabama | 10,588 |
| 125. Nashua | New Hampshire | 10,543 |
| 126. Oakland | California | 10,500 |
| 127. Portsmouth | Virginia | 10,492 |
| 128. Biddeford | Maine | 10,282 |
| 129. Hannibal | Missouri | 10,125 |
| 130. Ogdensburg | New York | 10,076 |
| 131. Stockton | California | 10,066 |
| 132. Council Bluffs | Iowa | 10,020 |
| 133. Zanesville | Ohio | 10,011 |
| 134. Akron | Ohio | 10,006 |

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